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ECONOMIC AND SOCIAL HISTORY OF THE WORLD WAR

British Series

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THE BRITISH COAL-MINING INDUSTRY DURING THE WAR

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EDITOR'S PREFACE

IN the autumn of 1914 when the scientific study of the effects of war upon modern life passed suddenly from theory to history, the Division of Economics and History of the Carnegie Endowment for International Peace proposed to adjust the programme of its researches to the new and altered problems which the War presented. The existing programme, which had been prepared as the result of a conference of economists held at Berne in 1911, and which dealt with the facts then at hand, had just begun to show the quality of its contributions; but for many reasons it could no longer be followed out. A plan was therefore drawn up at the request of the Director of the Division, in which it was proposed, by means of an historical survey, to attempt to measure the economic cost of the War and the displacement which it was causing in the processes of civilization. Such an 'Economic and Social History of the World War', it was felt, if undertaken by men of judicial temper and adequate training, might ultimately, by reason of its scientific obligations to truth, furnish data for the forming of sound public opinion, and thus contribute fundamentally towards the aims of an institution dedicated to the cause of international peace.

The need for such an analysis, conceived and executed in the spirit of historical research, was increasingly obvious as the War developed, releasing complex forces of national life not only for the vast processes of destruction but also for the stimulation of new capacities for production. This new economic activity, which under normal conditions of peace might have been a gain to society, and the surprising capacity exhibited by the belligerent nations for enduring long and increasing loss—often while presenting the outward semblance of new prosperity—made necessary a reconsideration of the whole field of war economics. A double obligation was therefore placed upon the Division of Economics and History. It was obliged to concentrate its work upon the

problem thus presented, and to study it as a whole; in other words, to apply to it the tests and disciplines of history. Just as the War itself was a single event, though penetrating by seemingly unconnected ways to the remotest parts of the world, so the analysis of it must be developed according to a plan at once all-embracing and yet adjustable to the practical limits of the available data.

During the actual progress of the War, however, the execution of this plan for a scientific and objective study of war economics proved impossible in any large and authoritative way. Incidental studies and surveys of portions of the field could be made and were made under the direction of the Division, but it was impossible to undertake a general history for obvious reasons. In the first place, an authoritative statement of the resources of belligerents bore directly on the conduct of armies in the field. The result was to remove as far as possible from scrutiny those data of the economic life of the countries at war which would ordinarily, in time of peace, be readily available for investigation. In addition to this difficulty of consulting documents, collaborators competent to deal with them were for the most part called into national service in the belligerent countries and so were unavailable for research. The plan for a war history was therefore postponed until conditions should arise which would make possible not only access to essential documents but also the co-operation of economists, historians, and men of affairs in the nations chiefly concerned, whose joint work would not be misunderstood either in purpose or in content.

Upon the termination of the War the Endowment once more took up the original plan, and it was found with but slight modification to be applicable to the situation. Work was begun in the summer and autumn of 1919. In the first place a final conference of the Advisory Board of Economists of the Division of Economics and History was held in Paris, which limited itself to planning a series of short preliminary surveys of special fields. Since, however, the purely preliminary character of such studies was further emphasized by the fact that they were

directed more especially towards those problems which were then fronting Europe as questions of urgency, it was considered best not to treat them as part of the general survey but rather as of contemporary value in the period of war settlement. It was clear that not only could no general programme be laid down *a priori* by this conference as a whole, but that a new and more highly specialized research organization than that already existing would be needed to undertake the Economic and Social History of the War, one based more upon national grounds in the first instance and less upon purely international co-operation. Until the facts of national history could be ascertained, it would be impossible to proceed with comparative analysis ; and the different national histories were themselves of almost baffling intricacy and variety. Consequently the former European Committee of Research was dissolved, and in its place it was decided to erect an Editorial Board in each of the larger countries and to nominate special editors in the smaller ones, who should concentrate, for the present at least, upon their own economic and social war history.

The nomination of these boards by the General Editor was the first step taken in every country where the work has begun. And if any justification was needed for the plan of the Endowment, it at once may be found in the lists of those, distinguished in scholarship or in public affairs, who have accepted the responsibility of editorship. This responsibility is by no means light, involving, as it does, the adaptation of the general editorial plan to the varying demands of national circumstances or methods of work ; and the measure of success attained is due to the generous and earnest co-operation of those in charge in each country.

Once the editorial organization was established there could be little doubt as to the first step which should be taken in each instance towards the actual preparation of the history. Without documents there can be no history. The essential records of the War, local as well as central, have therefore to be preserved and to be made available for research in so far as is compatible with public interest. But this archival task is a very great one, belonging of right to the governments and other owners of historical sources

and not to the historian or economist who proposes to use them. It is an obligation of ownership ; for all such documents are public trust. The collaborators on this section of the war history, therefore, working within their own field as researchers, could only survey the situation as they found it and report their findings in the form of guides or manuals ; and perhaps, by stimulating a comparison of methods, help to further the adoption of those found to be most practical. In every country, therefore, this was the point of departure for actual work ; although special monographs have not been written in every instance.

This first stage of the work upon the war history, dealing with little more than the externals of archives, seemed for a while to exhaust the possibilities of research. And had the plan of the history been limited to research based upon official documents, little more could have been done, for once documents have been labelled ' secret ' few Government officials can be found with sufficient courage or initiative to break open the seal. Thus vast masses of source material essential for the historian were effectively placed beyond his reach, although much of it was quite harmless from any point of view. While war conditions thus continued to hamper research, and were likely to do so for many years to come, some alternative had to be found.

Fortunately such an alternative was at hand in the narrative, amply supported by documentary evidence, of those who had played some part in the conduct of affairs during the War, or who, as close observers in privileged positions, were able to record from first or at least second-hand knowledge the economic history of different phases of the Great War, and of its effect upon society. Thus a series of monographs was planned consisting for the most part of unofficial yet authoritative statements, descriptive or historical, which may best be described as about half-way between memoirs and blue-books. These monographs make up the main body of the work assigned so far. They are not limited to contemporary, war-time studies ; for the economic history of the War must deal with a longer period than that of the actual fighting. It must cover the years of ' deflation ' as well, at least sufficiently

to secure some fairer measure of the economic displacement than is possible in purely contemporary judgments.

With this phase of the work, the editorial problems assumed a new aspect. The series of monographs had to be planned primarily with regard to the availability of contributors, rather than of source material as in the case of most histories; for the contributors themselves controlled the sources. This in turn involved a new attitude towards those two ideals which historians have sought to emphasize, consistency and objectivity. In order to bring out the chief contribution of each writer it was impossible to keep within narrowly logical outlines; facts would have to be repeated in different settings and seen from different angles, and sections included which do not lie within the strict limits of history; and absolute objectivity could not be obtained in every part. Under the stress of controversy or apology, partial views would here and there find their expression. But these views are in some instances an intrinsic part of the history itself, contemporary measurements of facts as significant as the facts with which they deal. Moreover, the work as a whole is planned to furnish its own corrective; and where it does not, others will.

In addition to this monographic treatment of source material, a number of studies by specialists is already in preparation, dealing with technical or limited subjects, historical or statistical. These monographs also partake to some extent of the nature of first-hand material, registering as they do the data of history close enough to the source to permit verification in ways impossible later. But they also belong to that constructive process by which history passes from analysis to synthesis. The process is a long and difficult one, however, and work upon it has only just begun. To quote an apt characterization, in the first stages of a history like this one is only 'picking cotton'. The tangled threads of events have still to be woven into the pattern of history; and for this creative and constructive work different plans and organizations may be needed.

In a work which is the product of so complex and varied co-operation as this, it is impossible to indicate in any but

a most general way the apportionment of responsibility of editors and authors for the contents of the different monographs. For the plan of the History as a whole and its effective execution the General Editor is responsible; but the arrangement of the detailed programmes of study has been largely the work of the different Editorial Boards and divisional Editors, who have also read the manuscripts prepared under their direction. The acceptance of a monograph in this series, however, does not commit the editors to the opinions or conclusions of the authors. Like other editors, they are asked to vouch for the scientific merit, the appropriateness and usefulness of the volumes admitted to the series; but the authors are naturally free to make their individual contributions in their own way. In like manner the publication of the monographs does not commit the Endowment to agreement with any specific conclusions which may be expressed therein. The responsibility of the Endowment is to History itself—an obligation not to avoid but to secure and preserve variant narratives and points of view, in so far as they are essential for the understanding of the War as a whole.

J. T. S.

PREFACE

IN this work the writer has endeavoured to give a clear and concise account of the coal-mining industry of the United Kingdom during the period covered by the Great War and up to the termination of Government control and the settlement following the national strike of miners in 1921.

In reviewing and commenting on events he has striven as far as possible against indulging in criticism of departments, classes, or individuals, and in those few cases where avoidance has not been possible the criticism is made without conscious bias. His endeavour throughout has been to be an impartial narrator of events.

His thanks are due to the editor of the Engineering Supplement of *The Times* for permission to make use in these pages of the substance of the articles which he contributed to that paper in January of 1920 and 1921.

The writer is especially grateful to his friend and late colleague, Mr. Arnold D. McNair, C.B.E., Tutor of Caius College and Lecturer in Law in the University of Cambridge, for having kindly perused the typescript of this work, and he is desirous of taking this opportunity of expressing his indebtedness to his colleagues of both the pre-control and control periods for their loyal assistance during an anxious and trying time.

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SECTION I

THE PRE-CONTROL PERIOD

CHAPTER I

INTRODUCTORY

The meaning of a Key Industry. — The rise of the British Coal-mining Industry. — The state of the Industry on the eve of the outbreak of the Great War. — The immediate effect of the War on the Coal-mining Industry of the United Kingdom.

An Historical Retrospect

CARLYLE has said that ‘ history is the basis of all true education ’, and, undoubtedly, in order properly to comprehend the present and forecast the future we must have some knowledge of the past.

When one reflects that the British coal trade has been in existence for seven centuries—that coal has been worked in this country and sold as an article of commerce since about A. D. 1215, the date of Magna Charta—one naturally inquires what progress has been made during all these years, and what has been the process of development.

In the Middle Ages wool was the staple product of the British Isles, a feature in our national economy illustrated and emphasized by the fact that the Lord Chancellor sits in the House of Lords on a woolsack. Now that the coal trade is the premier industry of Britain (with the possible exception of agriculture), it is to be presumed, if the significance of the seat of the Lord Chancellor is to be perpetuated, a sack of coals should be substituted for a sack of wool—not a more uncomfortable seat than that occupied of late years by more than one of His Majesty’s Ministers of State who have had to deal with the coal-mining industry and the problems arising in connexion therewith.

It was the fashion during the Great War to refer to certain industries as key industries, and to account coal-mining as one of these. But what is a *key* industry? If by the term is meant an industry upon the existence of which other forms of industrial productive effort are fundamentally dependent, then, certainly, the production of food, coal, and iron constitute key industries. It is a question of degree only, as all forms of manufacture are more or less interdependent. It is true that were there to be a complete cessation in the production of coal in the United Kingdom over a period of several months—i. e. over a sufficiently long period completely to exhaust the accumulated stocks of fuel in the country—all forms of transport actuated by steam, electrical or gaseous power, the generation and transmission of power, except on a negligible scale, and the manufacture of all goods which depend upon heat for their production, would cease. The price of imported coal would be too high to admit of its utilization for long, and the consequent increase in the cost of articles manufactured therewith would be too great to allow of their successfully competing in the markets of the world with more cheaply produced foreign goods; it would therefore be only a question of time before the nation had not the wherewithal to purchase either coal or other imported commodities, for we cannot produce enough food-stuffs to support the population for more than a few weeks. In view, therefore, of the extent of the present population of these islands and our present mode of life, the coal trade is undoubtedly a ‘key’ industry.

The significance of coal and its indispensability in our national economics were admirably described by the Minister of Munitions, Mr. Lloyd George, in his speech to the first great National Mining Conference held in London on the 29th July 1915 (see p. 21). ‘In times of peace’, said he, ‘coal is the most important element in the industrial life of this country. The blood which courses through the veins of industry in the country is made of distilled coal. In peace and in war King Coal is paramount Lord of Industry. It enters into every article of consumption and utility; it is our real international coinage. When we buy goods, food, and raw material abroad, we pay not in gold but in coal.’

What has been said as to the bearing of the coal industry on

other industries and the economic life of the United Kingdom is true of all the great coal-producing and manufacturing countries of the world. The factories and main arteries of transport of such countries as Italy, Sweden, Norway, and Denmark, countries unproductive of coal, are entirely dependent on other lands—chiefly Great Britain—for their coal supplies, and consequently in large measure for the continuance of their commerce.

Great Britain owes her commercial supremacy chiefly to her coal; its quantity, excellence, variety, and cheapness. In all these respects, except that of cheapness, no other country, with the possible exception of the United States of America, is so well situated; but whereas the great American coal-fields are far removed from the seaboard, in the case of Great Britain the length of transport from mine to port of shipment, with few exceptions, is insignificant.

Plentiful and cheap fuel—the two are largely complementary—are essential if we are to maintain our commercial supremacy in the markets of the world.

The great expansion in the coal-mining industry has resulted from the growth in the population, our advanced standard of comfort, our increasing dependence upon labour-saving appliances, and, pre-eminently, from the invention of the steam-engine and the developments in its application to transport and manufacture.

We have but to view the state of the world during the period 1775–1815, a period momentous in the history of the Anglo-Saxon race, and compare it with the present state of affairs in order to see with what giant strides the development of the coal-mining industry has proceeded. The former period, like that of 1914–19, was one of world upheaval, though on a limited scale compared to that through which we have recently passed. The United States of North America gained their independence (November 1782), the French Revolution broke out (1789), and Britain shattered the Napoleonic yoke (Waterloo, June 1815). At this time—the dawn of the nineteenth century—the coal trade of the United States of North America was non-existent, and the coal-fields of Belgium, Westphalia, and France undeveloped. The population of Great Britain (Ireland is omitted) was in 1811 only 11,070,120,

as against 40,980,311 in 1911, and some idea of the extent of the development of the coal trade is evidenced by the fact that the output for the year 1800 was estimated by the 1871 Royal Commission on Coal Supplies to have been 10,080,300 tons (2,240 lb. to the ton), or less than the production for one fortnight at the present time.

The export trade in coal was in its infancy in point of extent, though a foreign trade in coal had been assiduously cultivated in the eighteenth century, coal being frequently sold for export 40 per cent. under the prices of the London market. The first accurate return of coals shipped is in 1791, when the total amount of coal shipped from British ports totalled 335,038 tons, chiefly from the great northern coal-field.

Coal began to be used for the manufacture of gas in 1803 ; the safety lamp was invented in the year 1816, and the development of the railway system as well as the application of steam to the movement of ships may be said to have characterized the year 1845, by which time the output of coal had risen (as estimated by T. R. McCulloch) to 34,600,000 tons for the year, and the rate thereafter was almost continuously upward to the year 1913, when it attained the enormous figure of 287,430,473 tons.

The chief impression left by an historical review of coal-mining in the United Kingdom is the great progress made during the last two or three generations in every direction except in respect of the return on capital. This is apparent when one reflects that such everyday features of colliery working at the present time as shaft-cages and guides, the safety lamp, the steam locomotive, the trade in coke, ventilating fans, wire ropes, mechanical haulage, mechanical screening and sorting of coal, compressed air, and the application of electricity to signalling, lighting, and motive power, have all been introduced within the last one hundred and twenty years. There is hardly an appliance (save the simplest tools) or a machine in use at a modern colliery which could have been made at the beginning of the last century. Wages increased enormously. Thus, in the great northern coal-field, at the beginning of the eighteenth century, the wages of the coal hewers (roughly then as now about one-half of the number of workmen employed underground) were 1s. to 1s. 2d. per shift. One hundred years later

they had doubled, being at the beginning of the nineteenth century 2s. 3d. to 2s. 6d. per shift of eight to twelve hours, and at the end of last century they were 5s. to 6s. per shift of seven hours, the return on capital on the average remaining stationary.

Up to 1899 Britain was the largest producer of coal of any country in the world ; but in that year the United States of North America wrested this position from her with an output of 226,554,000 tons as against 220,094,741 tons, the production of Great Britain. The output from the United States for 1913 had risen to 508,893,052 tons.

Prior to the Great War Germany was the other chief competitor in the coal markets of the world. Her output doubled between the years 1890 and 1900 (being 150 million tons for the latter year), and in 1913 had risen to the imposing figure of 274,264,420 tons (made up of 188,433,296 tons of true coal and 85,831,124 tons of brown coal or lignite).

It will be seen from what has just been stated that considerable as has been the increment in the coal output of the United Kingdom, it has not been anything like so spectacular as that of the United States of North America and of Germany, yet Great Britain still, by reason of her geographical position, her great shipping industry, and the variety and excellence of her coal held the premier place in the coal export trade, Germany herself taking no less than 9,209,543¹ tons of British coal. The quantities exported during 1913 by the three countries under consideration being, respectively, Great Britain, 73,400,118 tons;² Germany, 34,598,408³ tons ; the United States of North America, 20,708,582 tons.

In point of the proportion of coal exported to coal produced, in terms of value, Germany before the war ranked as the fourth coal exporting country in the world, for :

Great Britain exported (1913), in terms of value, about 33 per cent. of the total value of the coal produced, or more than 10 per cent. of the total value of her exports.

Belgium nearly 32 per cent. of the total value of the coal she produced.

¹ These figures are taken from the official *Statistisches Jahrbuch* for 1915.

² i. e. exclusive of foreign bunkers, coke, and manufactured fuel, 73,400,000 tons.

³ Not including brown coal (lignite).

Australia about 32 per cent. of the total value of the coal she produced.

Germany nearly 25 per cent. of the total value of the coal she produced.

The State of the Coal-Mining Industry immediately preceding the War

Turning now to a consideration of the position reached by the coal-mining industry just precedent to the War, we find that of the world's output of 1,320 million tons the United States of North America accounted for 38·5 per cent., Great Britain 21·7 per cent., and Germany 20·4 per cent. In that year the number of coal-mines at work in the United Kingdom was about 3,000, at which there were employed an aggregate of 1,110,884 persons. The mines were being worked by about 1,500 companies, public or private, or by private individual owners. The coal properties, or royalties as they are commonly termed, were vested in the hands of about 4,000 owners. The capital invested in the industry is not exactly known, nor is it easy of determination. Many efforts have been made to arrive at it. Sir Josiah Stamp¹ has calculated that, based on the output of five years preceding the War, it would be £135,000,000. The estimated cost of production and profit to the coal-owners arising from the sale of the coal may be taken to have averaged as follows :

										s.	d.
Cost per ton of coal produced :											
Wages	.	.	.	.	.	.	.	.	.	5	6
Stores and pit wood	.	.	.	.	.	.	.	.	.	1	0
General expenses, inclusive of everything except depreciation and interest	.	.	.	.	.	.	.	.	.	1	3
Total	.	.	.	.	.	.	.	.	.	7	9
Profit	.	.	.	.	.	.	.	.	.	2	5
Grand total	.	.	.	.	.	.	.	.	.	10	2

¹ In his evidence before the Royal Commission on the Coal-mining Industry in March 1919. He showed that the profits of the coal-owners—apart from royalty-owners—had reached from £13,000,000 to £14,000,000 in the five years before the War, these figures being inclusive of interest on capital, whether that capital was borrowed or owned by the colliery proprietor. The present writer, with the late Sir Robert Giffen, calculated the capitalization in the year 1907 to be about 10s. per ton on the coal raised, which on the 1913 output would give £143,000,000 ; but

The Colliery Companies are divisible into Associated and Non-Associated Collieries according as they are or are not contributors to the local Associations of Coal-owners, which are of the nature of Masters' Unions ; there is one or more such Associations in each coal-field. For the purpose of dealing with matters of national importance these Associations are all represented on the Mining Association of Great Britain. The very few collieries which are outside the Associations usually conform to, adopt, and apply the decisions and agreements arrived at and entered into by the Coal-owners' Association in the district in which they are placed.

Similarly the miners and colliery workers generally are members of local branches of their Trades Union. There are few exceptions to this, the great majority of the Unions being connected with the Miners' Federation of Great Britain, the membership of which in 1913 was 642,900 out of a total of 1,110,884 colliery employees.¹

Before the era of Government control the wages of colliery employees were dealt with by District Joint Boards, but for some time certain of the miners' leaders had been urging national in preference to district settlements of wages. The arguments advanced against national settlement are, first, difference of conditions in respect of the occurrence of the coal, working practice, system of division of labour, method of payments ; and, secondly, the variations which exist in respect of the profit-earning capacity of different coal-fields.

For some years prior to the War the price of coal had, generally speaking, been on the up-grade ; thus, it has been estimated that during the period 1897-1910 the pit-head price had advanced no less than 38 per cent.

As frequent reference will be made in the course of these pages to problems connected with the distribution of our coal supplies, it will not be out of place to give at the outset some indication of the broad division characterizing normal times of trade.

taking the lesser figure for capitalization and the average profit quoted above, the interest return on capital is between 9 and 10 per cent., which cannot be regarded as excessive in view of the fact that all the capital that is sunk in the pit-shafts and in the initial development up to the time of winning the coal is capital that is ultimately lost when the mine is worked out.

¹ At the end of 1920 the membership had risen to 947,000 persons.

The comparative position as between the year 1903 and the year 1913 may be stated thus :

	1903 Tons	1913 Tons
Total output of coal-mines	230,334,469	287,430,473
Reserved for home consumption (not including bunker coal for foreign trade)	166,529,120	189,092,369

The balance was devoted to export and bunkers.

The average value of a ton of coal in 1913 was about 10s. 2d., a price the lowness of which we are not likely to experience again for many years, if ever. Of the home consumption, it was estimated that 80,000,000 tons at least were absorbed in the production of power, inclusive of railways.

Again comparing the year 1903 with 1913, the home consumption may be subdivided as follows :

<i>Where consumed</i>	1903 <i>Estimates from Coal Commission's Report</i>	1913 <i>Estimates based on pro rata increase except where more definite figures are available</i>	<i>Value at 10s. per Ton</i> £
	Tons	Tons	
Railways	13,000,000	15,000,000	7,500,000
Coasting steamers (bunkers)	2,000,000	2,500,000	1,250,000
Factories	53,000,000	60,000,000	30,000,000
Mines	18,000,000	19,000,000 ¹	9,510,000
Iron and steel industries	28,000,000	31,000,000	15,500,000
Other metals and minerals	1,000,000	1,250,000	525,000
Brickworks, potteries, glass works, and chemical works	5,000,000	5,750,000	2,875,000
Gas works	15,000,000	18,000,000	9,000,000
Domestic	32,000,000	35,000,000	17,500,000

The only disturbing element in the British mining industry immediately prior to the War was some trouble in the South Yorkshire coal-field arising from the interpretation of the minimum wage. The effect of this was temporarily to enhance the prices of coal in Yorkshire and the adjoining districts during the month of April. Otherwise, the tendency in prices was, during the year 1914, in a downward direction, which was especially pronounced in respect of industrial coal, a fact due to the trade

¹ Extensive returns showed that the total amount of coal consumed at collieries making the returns was during this year 18,168,811 tons.

depression in the iron, cotton, and other staple industries. In fact, we were witnessing the commencement of one of those waves of depression which are the corollary of a period of inflation and temporary over-expansion and consequent over-production, waves the length of which is determined by the speediness with which new markets and new sources of consumption are developed.

The Immediate Effect of the War on the Coal-mining Industry

The immediate effect of the outbreak of war was to hit the coal-mining industry of the United Kingdom by closing down entirely several important foreign markets and by temporarily or partially disorganizing business in many others. More coal was in consequence available for home consumption than was required, so that for a while many of the collieries were working short time. Whilst the normal consumption in some industries in the country was curtailed, there was expansion in several others. Transport facilities were considerably impeded by reason of the diversion of rolling stock and tonnage by the Government to other services; freights rose abnormally, and certain trade routes were closed for purposes of defence.

The staffs of workmen at many of the collieries became much depleted by reason of the call to the Colours; and the increasing cost of materials, especially of pit wood, further enhanced the difficulties of the industry. The war was waged fiercely in some of the chief coal-producing areas of Europe, viz. the Dombrowa, Silesian, and Galician coal basins in Eastern Europe; the Liège, Charleroi, and Mons fields in Belgium; and the Nord and Pas de Calais fields in France. The output of coal in Germany was in 1915 reduced by about 40 per cent. and her export trade nearly wiped out; Austria-Hungary was in similar plight. One high authority has estimated that the world's annual supply of coal was diminished by over 60 million tons, and this is probably a very conservative estimate. The decline in coal and coke exports from the United Kingdom amounted to about 14 million tons in the year 1915. It was prophesied that one effect of the War would be the creation of a growing competition

from the United States of North America in the coal markets of the world, a prophecy which has frequently been put forward in times of strife in the British coal industry, but one which, on this occasion, appears to have been well founded as later events demonstrated.

The falling tendency in coal prices for some time prior to the outbreak of the War and for a short while subsequent thereto, and also the great rise in freights immediately after the outbreak of war, are shown by the following figures :

PRICES OF SOME TYPICAL CLASSES OF COAL

Class of coal	Average price per ton					
	1 Jan. 1914		1 July 1914		1 Jan. 1915	
Best Northumberland steam coal, f.o.b. Tyne	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
	14 0	to 14 6	13 6	to 13 9	12 3	to 12 6
Best Durham gas coal, f.o.b. Tyne	15 0		13 0		12 6	
Durham coking coal, f.o.b. Tyne	13 0	to 14 0	12 0		10 0	to 10 6
Foundry coke, f.o.b. Tyne .	21 0	„ 23 0	19 0	to 20 0	19 0	„ 20 0
Best Yorkshire silkstone, f.o.b. Tyne	15 6	„ 16 0	15 6	„ 16 0	15 6	„ 16 0
Best Welsh steam coal, f.o.b. Cardiff	20 6	„ 21 0	21 0	„ 21 6	21 0	„ 22 0

VARIATION IN FREIGHTS

Ports	Price per ton					
	1 Jan. 1914		1 July 1914		1 Jan. 1915	
Tyne to :	s.	d.	s.	d.	s.	d.
Rouen	4	3	4	6	17	0
Marseilles	7	0	7	9	21	0
Genoa	7	11½	7	9	21	6
Alexandria	7	9	8	0	22	6
London	3	11½ to 3 3	3	0	11	6
Cardiff to :						
Genoa	7	3	8	0	17	9
Bordeaux	4	3	5	3	11	0
Marseilles	7	0	7	6	15	0
Havre	4	3	4	11½	11	6
Barcelona	8	0	8	6	16	0
Las Palmas	7	3	7	0	13	0
Alexandria	7	6	7	6	19	6
River Plate	13	0	14	6	16	3

The temporary superabundance of coal in Great Britain was of short duration. The lower output due to the departure of a large number of miners to join the Colours, the greatly increased requirements of the Admiralty, the stimulus given by the War to the manufacture of armaments, and the high prices which were soon in evidence for export coal, created a demand which more than absorbed the temporary excess of coal and produced a state of affairs calling for the earnest consideration of the Government.

CHAPTER II

THE YEAR 1915

Organization of the Industry. — The conditions which led to the setting up of the Coal-mining Organization Committee. — The Constitution and Work of the Committee. — Proposals advanced and efforts made by the Committee for the maintenance of output. — The situation in the middle of 1915. — The Control of the Export of Coal. — The Work of the Coal Exports Committee.

Preliminary Remarks. The Conditions necessitating Special Organization of the Industry

THE great output of the year 1913 of 287,430,473 tons of coal came from 3,000 collieries, and there were employed in its production no less than 1,110,884 persons. It will readily be comprehended how vast and complex is the machinery of organization involved in the getting, transporting, and disposal of so great an output, the more so as, not only do the geological and physical conditions of the respective coal-fields greatly vary but great diversity exists as between the systems of working the coal, the division of labour involved, and the methods of payment practised in the respective coal-fields, and—this is a matter of importance in connexion with the consideration of the question of mining labour disputes—the psychology of the miners in different districts is very dissimilar. It will be realized, therefore, what was implied by the partial disruption of such an industry by the exigencies of a world war and the magnitude of the task involved in maintaining the organization in the highest state of efficiency that the circumstances would permit.

The call of the Minister for War, Lord Kitchener, for five hundred thousand men for the army, followed shortly by an appeal for another five hundred thousand, thrilled all classes of society and met with a remarkable and immediate response. From no class of the community did this call on their patriotism meet with a more spontaneous and conspicuous answer than from the coal-miners. No less than 191,170 men, or nearly 19 per cent. of the total personnel (men, boys, and women)

employed at the collieries of the United Kingdom, joined the Colours during the first seven months of the War. Some, though comparatively few, of these were, of course, reservists, who were called up immediately on the declaration of war. But the result is still more eloquent of the patriotism of the miners when it is reflected that these men were drawn only from those of military age; that is, between the ages of 19 and 38. It is estimated that 40 per cent. of the miners of military age were absorbed into military service, and by far the greater number left the mines in the early weeks of the War, that is, in the autumn of 1914. It goes without saying that this exodus was immediately reflected in a grave reduction of the productive capacity of the mines. See also pp. 15, 38, 49, and 55.

*The Establishment of the Coal-mining Organization Committee
and the Problems with which it had to grapple*

Although the exact figures of recruitment of miners were not available until later, it early became evident that some system of organization of the industry was imperative if an output of coal was to be maintained sufficient to meet the requirements of the nation and to allow of the export trade in coal being carried on. What was required was such an organization as, whilst envisaging and embracing the whole of the coal-mining industry of the United Kingdom, would interfere as little as possible with the working and management of the separate units or collieries which go to make up the industry, and would indicate certain definite lines of policy and practice applicable to every unit.

The present writer in his then capacity of Chief Inspector of Mines was consulted on the subject by the Government, with the result that the Home Secretary (the Rt. Hon. R. McKenna, M.P.), on the 23rd February 1915, appointed a Committee: 'to inquire into the conditions prevailing in the coal-mining industry with a view to promoting such organization of work between employers and workmen as, having regard to the large number of miners who are enlisting for naval and military service, will secure the necessary production of coal during the war.'

The composition of this Committee was of a representative character. It comprised three prominent representatives of the

Mining Association of Great Britain, one of whom (the Earl of Crawford and Balcarres)¹ was President of that Association, and three representatives of the Miners' Federation of Great Britain one of whom (Mr. Robert Smillie) was President of the Federation. The Committee was presided over by the then Chief Inspector of Mines, and it continued in existence for two years until in the early weeks of the year 1917 it was finally merged in the scheme of control then initiated. The pleasantest relations existed among the members of the Committee, its proceedings were characterized throughout by complete harmony, and, with but one exception, its resolutions were unanimous. It is not too much to state that the work of the Committee conduced in no small degree to the harmonious relations which, with one partial exception, viz. the South Wales coal-field, existed between coal-masters and the miners, during a very trying period in our history, and to the maintenance of the output at the highest figure possible in the circumstances then prevailing.

The work which immediately presented itself for the consideration of the Committee was of a twofold nature. It had first to ascertain the exact position of the industry as conditioned by the War, and then, having surveyed the position, to put forward suggestions for its amelioration. As will easily be imagined, this necessitated very long and frequent sittings of the Committee and the daily attention of its Chairman.

It was necessary to determine the extent to which the collieries had been depleted of labour, to what extent, if any, this depletion had been made good from other sources, what had been and what was likely to be (unless means could be taken to counteract it) the effect of the depletion on output, and to ascertain what amount of time was being lost by the workers which could be made good. Having completed this part of the investigation, it was then necessary to consider what means might be devised for maintaining the output at as high a figure as possible, having regard to the fact that the depletion of labour would be, to some

¹ Lord Crawford a few weeks later voluntarily joined the army as a private and proceeded to France, and the Home Secretary appointed Mr. Adam Nimmo (afterwards Sir Adam Nimmo, K.B.E.) to fill the vacancy on the Committee.

extent, a continuing process owing to the persons employed in and about the coal-mines leaving to join the Forces.

As already stated, the workers who had left the mines amounted to about 19 per cent. of the total labour employed thereat ; but it was found that 50,473 persons from other employments, or approximately 5 per cent. of the normal personnel of the coal-mines, had been drafted into the mines during the same period, viz. to the end of February 1915, so that the net reduction in mining labour was 14 per cent. The decrease in the output of coal almost equalled in percentage this figure, being $13\frac{1}{2}$ per cent. The Committee in their first Report (issued 27th May 1915) stated : ‘ Probably the exodus of labour from the mines was due in some measure to the fact that some weeks after the outbreak of war the mines were working very short time, more especially in Northumberland, where the mines are very largely dependent on export for their existence. But we are of opinion that, taking the country as a whole, the depletion of labour from this cause was inconsiderable.’

Basing the calculation on the rate of decrease in output during the last five months of 1914 and the first two months of 1915, it was estimated that there would be a loss of output over the first twelve months of the War of 36 million tons, and further that, if the recruitment of miners for the Forces continued, the deficiency would be increased.

Although recruiting continued to the extent that 56,850 more persons withdrew themselves from the mines within the period March–August 1915, the loss was not so heavy as had been anticipated. In all, during the first twelve months of the War 250,750 workers left the coal-mines, and 74,822 persons from outside entered the mines ; so that the net loss of coal-mining labour amounted to 16 per cent. The decrease in output was 11 per cent. That the loss of output was not greater was largely due to the remedial measures instituted by the Coal-mining Organization Committee.

*Some of the Matters which had to be dealt with by the
Coal-mining Organization Committee*

The basis of all the proposals and suggestions made by the Committee was harmonious co-operation between employers and employed, each through the medium of their own organization, the two organizations being thoroughly representative of the two parties.

The nature of the proposals and suggestions put forward, the action taken, and the outcome thereof may now be referred to in some detail.

(a) *Irregularity of Work by the Miners.* The importance of the bearing of this on the question of output is self-evident, and the Committee concentrated on the point, for, of all the means by which output might be augmented, reduction in what the Committee termed 'voluntary absenteeism' presented, in their opinion, the greatest possibilities.

After close examination of statistics, and the interrogation of witnesses—viz. Directors of Colliery Companies, Mining Engineers, Secretaries of Coal-owners' Associations, Miners' Agents, and others—they discovered that the average amount of abstention from work prevalent at collieries on the days on which the mines are open for work as calculated over all classes of coal-mine workers was, for the seven months August–February (inclusive) of 1913, 10·7 per cent., and for the seven months August–February (inclusive) succeeding the outbreak of war 9·8 per cent. of the possible full time. They found, also, that 5 per cent. is a liberal allowance to make, over all classes, of colliery labour—surface and underground—for enforced absence from work due to sickness, injury, and other unavoidable causes. There therefore remained a balance of 4·8 per cent., which could be made productive if one and all put in a regular attendance at work. Now 4·8 per cent. of the number of persons employed at the mines in 1914, viz. 1,116,645, is equivalent to 53,599, which multiplied by 259, the output in tons of coal per person employed above and below ground inclusive in the year 1913, gives 13,882,141 tons as the extra quantity of coal which might be got were voluntary abstention from work completely to cease.

But that this was an under-estimate the Committee were well

aware for the reason that the percentage of lost time is greater on the part of the labour employed at and about the coal face, viz. of the coal getters (hewers) and hauliers (putters), than in respect of other classes of underground labour, and considerably so in comparison with the surface labour of collieries. In point of fact the percentage of voluntary absenteeism of coal face labour varied between 12·6 and 15 per cent. in respect of the different coal-fields.

Perfect regularity of attendance at work is not to be expected—it does not come within practical possibilities. The Committee, however, expressed the belief that the case had only to be put before the miners in order to secure a great response on their part, and it further suggested that the body best fitted in all respects to put forward the case and support and promote the object aimed at was the Executive of the Miners' Federation of Great Britain.

(b) *The Utilization of Holidays for the Production of Coal.* There are two kinds of holidays observed by the coal-miners, namely the customary short or idle days in the fortnight and certain well-recognized periodic holidays in the year. With regard to the former, the Committee came to the conclusion that it would not be practicable in those coal-fields where ten full and two short days were worked in the fortnight to convert the two short days into full days ; such action might have conduced to an increase in voluntary absenteeism. But where the practice existed of working only ten days and taking two full idle days, or of working ten full days and one short day, they suggested that, in view of the time of special emergency, employers and workmen should lay their heads together with a view to arriving at some extension of the working time.

As to periodic holidays, the Committee recognized the danger arising from a more or less general cessation—however temporary—in the production of coal throughout the coal-fields or some large part of them, in a time like that existing. Holidays, therefore, occupied a somewhat different position in the problem than the question of occasional and individual absenteeism. In some districts, in Scotland in particular, it was customary to take extensive holidays during the summer, varying in point of time from three days to a week on end, though in Scotland the festivals

of Easter and Whitsuntide are not observed ; whereas in England and Wales it had been customary to take from one to two days off work on each of these occasions, and in some parts the greater part of a week. The Committee, whilst it did not suggest considering Christmas Day, New Year's Day, or August Bank Holiday as possible working days, stated that, if the workmen were appealed to by their leaders to contract these and other recognized more or less general holidays, they, the miners, would respond to this appeal. That they were not wrong in this belief was instanced by what took place in the first Easter of the War. Just before Easter the present writer had an interview with Lord Kitchener and laid before him the probable consequences which would result from a general cessation of work at the collieries in England and Wales for several days at Eastertide, coal and coke being at this time in most urgent request for keeping the great munition works going. The pressing personal appeal from Lord Kitchener, which was the outcome, supported by the Executive of the Miners' Federation of Great Britain, that the miners should limit their Easter and Whitsuntide holiday met with a most gratifying response, and on this occasion (1915), in respect of the Easter holidays alone, it was estimated that the increased output effected by the reduced holidays amounted to nearly one million tons of coal. His Majesty the King, by Proclamation, thanked the miners for their action.

(c) *The Question of the Advisability of Suspending the 'Eight Hours' Act*¹ of 1908. The so-called Eight Hours' Act limited the hours of persons employed underground in those mines governed by the Coal Mines Act to certain periods in each day of twenty-four hours, in respect of the majority of the classes of workers, to eight hours ; that is to say in respect of a shift (gang or number of persons), as reckoned from the time of the descent into the mine of the first man in the shift to the time of the ascent of the first man of the shift from the mine, which of course meant that the average was something more than eight hours. Under a section of this Act His Majesty might (as he may under the revised

¹ Amended on the 15th August 1919, whereby 'seven hours' is substituted for 'eight hours' in the case of the majority of the workmen, and certain other modifications are made.

Act), in the event of war or of imminent national danger or great emergency, or in the event of any grave economic disturbance due to the demand for coal exceeding the supply available at the time—all of which conditions were at this time existent—by Order in Council suspend the operation of the Act to such extent and for such period as may be named in the Order, either as regards all coal-mines or any class of coal-mine.

British coal-mining is, perhaps, the most highly-organized industry of this or any country, and the more complex the system of labour—the greater the extent to which the division of labour is carried—the more difficult it is peacefully to introduce changes into the system. This the Committee fully apprehended, and they decided, therefore, not to put before the Government any definite proposal in relation to suspension, but to recommend to the coal-masters and miners that they should confer together and themselves determine to what extent, if at all, the Act should be suspended in individual districts, i. e. to what class of labour the suspension should apply, the amount in point of time the suspension should cover, and the coal-mining districts to which any modifications should be made applicable.

(d) *Further Employment of Women and Reduction of the Age Limit in the case of Boys.* With regard to the further employment of women on the surface of the collieries with the object of releasing men and boys for underground work, it should be explained that the employment of women on surface colliery work is common in Lancashire and Scotland. Experience has shown that the work is not degrading, and that it is more healthy than in factories where women and girls are so largely employed. But in other parts of the country women are not, or very rarely, employed in colliery work, and it was found that any move towards inducing their employment in these barred areas would only lead to disturbances which would more than negative any useful result it was sought to obtain. The Committee, therefore, left the matter to be decided district by district. At the end of 1913, 6,554 women were employed at collieries, of whom Scotland and Lancashire accounted for 5,762; but during the years 1914 and 1915 this number increased, until 8,312 were employed at the end of 1918.

It was found that considerable resentment would be engendered by any attempt to lower the age at which boys could be employed below ground, and that the relief which would have followed upon such a course was so small as to be not, or very rarely, worth the risk of incurring stoppages at any of the collieries. The Committee, therefore, made no recommendation in this connexion.

(e) *General Reorganization at the Mines.* The Committee indicated certain directions in which, possibly, internal reorganization of the mines might be carried out, with a view to increasing output, notably, as far as practicable, in the concentration of the work of coal getting and postponement of exploratory or 'dead' work. This advice was in large measure followed, the more easily got coal being worked in preference to the more difficult seams or portions of seams. This fact, coupled with the postponement of much of the exploratory and development work until after the war, undoubtedly conduced to the maintenance of the output at a higher figure than otherwise would have been obtained, and equally undoubtedly contributed to the backward state of development which characterized many of the mines on the termination of the War, and to the declining output in the last three or four years. Like many other things this policy of concentration upon coal getting was a necessary evil in view of the circumstances.

(f) *Economy in the Use of Coal.* The Committee were of the opinion that the time had arrived when the importance of economy in the use of coal should be brought before the public. They said: 'Savings which at once occur to the mind are economies in public and private lighting, whether by gas or electricity, and the manufacture of luxuries which require coal. The rise in the price of coal will no doubt create a tendency towards economy, but we believe that a considerable further saving could be effected if it were brought home to the public that it is a patriotic duty to economize during the period of the war.' An 'economy' leaflet was drawn up giving 'hints to householders', of which over one million copies were issued and distributed. A more equitable distribution of the coal available for home supply was deemed necessary, and as a consequence the Coal and Coke Distribution Committee was established (see p. 36).

The First Great National Meeting of Coal-owners and Miners

On the 29th July 1915 a great national meeting of the mining industry was convened by the Home Secretary and presided over by him, being addressed by the Minister of Munitions¹ (the Rt. Hon. D. Lloyd George) and others, including representatives of the colliery owners and workmen. The gathering took place in London and was attended by delegates from all the coal-mining districts of Great Britain. The following resolution was submitted to the great concourse and passed unanimously, viz.: 'That in the opinion of the meeting, representative of the coal-mining industry of Great Britain, every effort should be made by owners and workmen alike to secure the greatest possible output of coal in the interest of the nation during the period of the War.'

A Conference of Representatives of the Industry

Consequent upon this Congress a letter from Mr. Thomas Ashton, the Secretary of the Miners' Federation of Great Britain, was addressed to the Chairman of the Coal-mining Organization Committee suggesting that the Committee should call a joint conference of representatives of coal-masters and workmen to consider the best means of carrying into effect the Committee's recommendations as embodied in their Report of the 27th of May. The suggested conference met at the Home Office on the 2nd September 1915. It was found that the workmen's representatives were strongly of the opinion that the question of the suspension of the Eight Hours' Act should not be considered until it was seen how far the joint effort which was to be made by colliery owners and workmen towards increasing the output had been successful. The coal-masters' representatives recognized that the suspension could not usefully be applied until co-operation in the matter between the parties was possible.

Other Matters dealt with by the Committee

There were a number of other matters considered by the Committee, some of the utmost importance, either falling to be dealt with by the Committee in the ordinary course of their work

¹ The Ministry of Munitions was established very shortly after the Coal-mining Organization Committee was set up.

or specially referred to them by the Government, such as the institution of special District Committees for the promotion of regularity of work at the collieries, arrangements to be made in regard to the recruitment of miners and arrangements so as to reduce to a minimum the handling of disputes at collieries (more especially in connexion with the non-Union question), and matters relating to the supply of materials necessary for carrying on the collieries—in particular pit timber and the supply of machinery and plant.

The pooling of railway wagons, the control of the export of coal, the limitation in the selling price of coal, and the inland distribution of coal were also considered. Some of these matters, however, arose at a later date and will be more satisfactorily described and examined under separate chapters. In the meantime let us turn to the consideration of the situation in the industry in the middle of the year 1915.

The Situation in the Middle of 1915

The inauguration of the Ministry of Munitions, the paramount importance of a considerable increase in the supply of the munitions of war, and the increased efforts made to secure this result, led to great activity in the iron and steel industries, always great consumers of fuel. Their demands, added to the increasing requisition of fuel for the Royal Navy and insistent demands from France, necessitated a national stocktaking of the fuel situation in order that a more effective system of distribution or of control might be evolved to meet the altered circumstances. It was true that export of coal to Germany, Austria-Hungary, Turkey, Belgium, and in great measure Russia, had ceased, with a consequent saving of about 18,400,000 tons per annum; but production had fallen to the extent of 31 million tons per annum, and France, which in normal times took from 11 to 12 million tons of British coal, was now asking for twice that quantity. Most of her coal-mines were situated in territory occupied by the German armies, and as such coal as she usually obtained from Belgium was also unavailable, she had no option but to turn to us to make good the deficiency, a deficiency aggravated by her endeavours to increase her supply of the munitions of war.

The comparative position in Great Britain as disclosed at this time may be epitomized thus :

	<i>August 1913 to July 1914</i>	<i>August 1914 to July 1915</i>
	<i>Tons</i>	<i>Tons</i>
Output	281,076,000	250,357,000
Exports ¹	76,065,000	46,458,000
Foreign bunkers	21,162,000	14,934,000
Balance for home use and Admiralty	183,849,000	188,965,000

Early in 1915 it became obvious that, if the most imperative demands were to be adequately met, there must be a curtailment of exports and also the haphazard distribution of the home supplies must be replaced by a more scientific organization.

A Committee had been set up in February 1915 by the President of the Board of Trade under the Chairmanship of Mr. Vaughan Nash, C.B., C.V.O., to inquire into the causes of the rise in the retail price of coal sold for domestic use, especially to the poorer classes of consumers in London and other centres. This Committee reported on the 24th of March, making the following recommendations, viz. that :

- (i) Export to neutral countries should be restricted.
- (ii) Steps should at once be taken to consider, in consultation with the public bodies concerned, the question of the accumulation by such bodies of reserves of coal in or near London, for the use of small consumers during next winter.
- (iii) The rates of freight in the interned steamers should be further reduced.
- (iv) Suitable enemy ships condemned by the Prize Courts should be taken over by the Government and used for coal transport.
- (v) If prices do not shortly return to a reasonable level, the Government should consider a scheme for assuming control of the output of collieries during the continuance of the War.

All of which recommendations were eventually more or less carried into effect.

¹ Including the estimated coal equivalent of coke and patent fuel exported.

It would almost seem a perversion of economic principles that our coal exports should be curtailed just when the strain of the War upon our financial resources demanded an increase in our export trade to balance the excess of our imports ; but our other wants were still more pressing.

*The Control of the Export of Coal. Establishment of
a Licensing Committee*

Shortly after its appointment the Coal-mining Organization Committee was requested, by the President of the Board of Trade, through the Home Secretary, to consider the recommendation of the Departmental Committee on the retail price of coal mentioned above, viz. that exports to neutral countries should be restricted. On the 31st of March the Organization Committee recorded its opinion 'that if it can be shown that the home needs are not being met, owing to a shortage of supply, the only relief apart from increase of output or improved distribution would be the placing of some restriction on the export of coal out of the United Kingdom, but that such restriction should not affect :

- (i) The coal required for the British Mercantile Marine.
- (ii) The coal supplied to the British Allies, or to such other countries as the Government may determine.
- (iii) Coal which is sent abroad to the extent essential to secure return cargoes necessary for this country, e. g. grain from the Argentine, iron ore from Bilbao, &c.'

They added, also, as an overriding proviso, that special consideration would have to be given to those coal-mining districts in the United Kingdom, the collieries of which, to a large extent, depend on export for their existence, e. g. Fife, Northumberland, and South Wales, the coal from which does not, in normal times, compete, except possibly to a small extent, for the internal trade of Great Britain. The President of the Board of Trade adopted the Committee's report, and on the 27th April 1915 appointed a Standing Committee to consider and advise on all questions relating to the exportation of coal to all destinations abroad other than British possessions and Protectorates, and Portugal.

This was, in the first instance, a Committee of three, the

Chairman being a distinguished political economist (the late Rt. Hon. Russell Rea, M.P.), and the remaining two, the late Sir Douglas Owen, K.B.E., who organized and presided so efficiently over the work of the War Risks Insurance Committee, and the present writer.

On the 13th May 1915 an Order in Council prohibiting export to neutrals (except by licence) became operative, and on the 13th of August of the same year, consequent upon the passing of the Price of Coal (Limitation) Act, to which further allusion will shortly be made, this prohibition had to be extended to the Allies.

The Work of the Coal Exports Committee

Put succinctly, the objects of the Coal Exports Committee were:

1. To retain in this country the coal necessary for home consumption.
2. To secure a sufficient supply for the necessary consumption of our Allies, especially France, which required and had to be furnished with a quantity about double that of her pre-war import from Great Britain.
3. Subject to the foregoing conditions, to encourage the free export of the surplus to neutral countries at the highest possible price.

In pursuance of what may be termed its *economic* functions, the Coal Exports Committee had, as far as possible, to concentrate the foreign demand on the areas mainly dependent on export trade, then greatly limited by the War; that is, it had to consider the extraordinary and sudden effect of the War upon production and demand. This differed greatly in various districts—a side of the question in regard to which considerable ignorance exists outside the mining world. For example, in the spring of the year 1915, when prices reached their culminating point in that year and London was in a state of panic, the exporting collieries of Northumberland were working but two days a week.

To readjust a dislocated supply and demand by a somewhat harsh method was one of the principal tasks of the Committee, and it was naturally not accomplished without offence and injury to individuals. The organization of a Committee of coal-owners

and shippers in South Wales (the first of an eventual series of Committees in the coal-exporting districts of Great Britain), in the words of the Chairman of the Coal Exports Committee, ' must prove a better method of effecting such an adjustment than the " abhorred shears " of a Licensing Committee, especially when the problem of keeping up home supplies has been complicated by a statutory maximum price for home supply only '.

The Coal Exports Committee had another function to perform, military in character, namely to assist in bringing ' coal pressure ' to bear upon neutral Governments and their subjects and to prevent coal from going to places and firms where it might be of service to the enemy. By September the *economic* function had been largely fulfilled, at any rate for the time being, the situation having been helped : (a) by the improvement in output, and (b) by the dearth of shipping tonnage which just then was severely hampering the export trade.

It was felt that the proximity of Holland to Germany and the consequent industrial activity of Holland in furnishing munitions and other supplies to Germany rendered necessary an increased degree of surveillance over the export of coal to Holland. It was decided, therefore, that after the 1st September 1915 application for licence to export coal to Holland must be accompanied by a certificate from the Netherlands Oversea Trust (an organization as to the bona fides of which the British Government were absolutely satisfied) that they had agreed with the consignees to accept delivery of coal on their behalf.

France set up a Commission de Répartition d'Armement and established a fairly close hold over the distribution of supplies. The British Government undertook to buy Welsh coal for the French Government at the same price that it paid for its own supplies, and one of the French Corps de Mines, M. Léon,¹ took up his residence in London to look after the interests of the French Commissioners, keeping in daily touch with the Coal Exports Committee.

It will be realized that the circumstances and conditions were

¹ This distinguished servant of the French Government, after many months of untiring and excessive labour on behalf of his country in London, died there suddenly in 1916.

such as to involve the Committee in work of vast extent. The merits of every application to export coal had to be minutely considered from several points of view, that of home requirements, the extent of the urgency of the proposed consignment and requirements of the country, industry, or firm to which it was proposed to send coal, and the bona fides of the applicant. The Committee sat daily, and one or more members were in attendance all day.

In every case the necessity for, and the uncertainty as to, obtaining a licence constituted a regrettable restriction on and hampering of trade. An application form had to be prepared by the exporter, sent to the War Trade Department, and acknowledged ; approved (in the case of Italy and Russia) by the Trade Clearing House ; referred to the Coal Exports Committee, then checked against lists of shippers, consignees, ships, and collieries ; adjudicated on by the Committee ; returned to the War Trade Department, and the result communicated to the exporter by that Department, where the licence was drafted, typed, and checked, and sent to the Privy Council for sealing ; sent back again to the War Trade Department, and thence to the exporter for production to the Customs on pre-entry before clearance, all of which processes involved the entering of particulars in the registers and careful indexing by the various departments concerned, and this at a time when labour was scarce and expedition highly desirable. But in the circumstances this multiplicity of processes was unavoidable.

The form of licence which was used is given in Appendix I. With a view to minimizing as far as possible the delay consequent upon postage of the licence, delay which was very inimical to the dispatch of the coal and frequently led to difficulties in chartering, arrangements were made whereby applicants for coal export licences, who desired to do so, could make a pre-entry and commence loading upon or shortly after the receipt of a telegram from the Committee stating that a licence had been recommended by them. Applicants who desired to avail themselves of this arrangement were requested to attach to their application two prepaid telegraph forms, one addressed to themselves and the other to ' Customs London ', the latter to contain the following particulars :

- (a) Applicant's own reference number of application.
- (b) Port of shipment.
- (c) Applicant's own name.
- (d) (If known) name of vessel.

By an Order in Council dated the 30th July 1915, the free export of coal to the Allies was prohibited as from the 13th August 1915. To British possessions and Protectorates alone was unrestricted export permissible. But the Committee gave assurance that provided local consumption obtained adequate supplies there was no desire to interfere with exports.

The extension of the prohibition of export to the Allied countries, necessary at the time, perhaps, for our own domestic reasons, greatly increased the task of the staffs of the Customs, of the War Trade Department, and of the Coal Exports Committee. A good deal was done, though probably less in the case of the Allies, in diverting wherever possible the foreign demand to districts which, through loss of export markets owing to the war, needed orders to keep the pits busy. The Allies' trade did not form such fruitful ground for the use of this instrument as did the trade with neutrals, with whose trade the Committee had naturally less hesitation in interfering. As regarded home supply, colliery owners were not long in realizing that the Committee was not only able to exercise a drastic control over them, but was prepared to put its warnings into execution if they met with inadequate response. The Committee occasionally, but as time went on much more rarely, received complaints that home consumers were unable to obtain their necessary supplies, though, on the whole, the position of the home supply towards the close of 1915 ceased to cause anxiety. In the event, however, of free unlicensed export to the Allies being allowed, those collieries which solely or mainly exported coal to the Allies would have passed out of the Committee's direct control. It was, therefore, necessary to retain the power given by the licence.

CHAPTER III

THE YEARS 1915-16

Coal pressure. — The position in respect of Coke. — Compulsory Limitation of the Price of Coal for Home Consumption. — The Inland Distribution of Coal. — Prices of Coal.

Coal Pressure

DURING certain periods of the war the trading value of coal became very pronounced. It is an axiom of industrial economics that the more nearly perfect the market, the stronger is the tendency for the same price to be paid for the same thing at the same time in all parts of the market, but the War had upset the equilibrium of normal demand and supply, especially in respect of the commodity coal. Coal became of greater value as a means of barter than gold; for a free exchange in coal did not exist. Certain Governments, notably the British and the German, held its delivery under control. For instance, we supplied coal to Norway and Sweden—at a price—subject to those countries giving us in exchange return cargoes of pit timber and certain classes of iron ore and steel billets of exceedingly high quality melted by means of charcoal. To Sweden also we supplied, at one time, bituminous coal and anthracite subject to that country releasing for transport to Russia certain medical stores of which the latter country was in great need. Similarly Switzerland relied almost entirely on German coal for industrial purposes, and Germany used this weapon as a means to press for ‘compensatory goods’ from Switzerland. From Sweden also she obtained iron ore in like manner.

In connexion with the weapon of ‘coal pressure’, mention must be made of the far-reaching results of the unofficial but not unorganized efforts of British coal exporters and of British proprietors of coaling depôts throughout the world. By a systematic development of the policy of only granting supplies of coal for bunkering and other purposes upon condition that those receiving such supplies would render certain services to the British Empire

and her Allies or would abstain from giving certain facilities to her enemies, the firms who controlled the marketing of British coal were gradually able to exert a degree of pressure upon neutral shipowners and manufacturers which formed a most valuable contribution towards the measures aimed at throttling the economic life of our enemies.

These facts will have revealed the obvious necessity of the Committee having its hand constantly on the pulse of trade. A policy which events dictated as advisable in one month might be subject to complete or partial modification in the succeeding month. The case of coke is an important one, and may be taken as an illustration.

The Position in respect of Coke

Great efforts for some time had been put forward by the Ministry of Munitions to secure an increase in the production of coke, especially of coke manufactured in by-product recovery ovens; not that such coke is more suited to the various metallurgical processes incident to the manufacture of armaments than that made in the 'beehive' ovens, as the non-recovery by-product ovens are termed, but owing to the fact that the by-products, or some of them, were required in the manufacture of high explosives, the demand for which was constantly increasing.

Germany may be said to have been the home of the modern by-product recovery oven. It is on record that she even occasionally imported coal of high coking quality from Great Britain, extracted the by-products, and exported the coke to England. Although the use of by-product recovery ovens had been extending of late in the United Kingdom, we were far behind Germany in this respect upon the outbreak of war; not only so, but Germany by reason of her great aniline dye works put the by-products recovered from the carbonization of her coal to better use than we did. On the other hand—and this fact should be borne in mind, as it has an important bearing in other important connexions—it was not long before Germany found herself overstocked with coke. Now it is the nature of all coke, and metallurgical coke in particular, that it is not suited to the raising of steam even under forced draught. It can be so used, but its use is

far from satisfactory. Gas coke can, when mixed with coal, be used for the domestic fire, but not so metallurgical coke.

It was not long before a congestion in respect of coke became apparent in this country as well as in Germany, and towards the close of the year 1915 the Minister of Munitions (the Rt. Hon. D. Lloyd George, M.P.) appointed a Committee of Experts, under the chairmanship of the present writer, to consider and report as to the best means of dealing with the supplies of metallurgical coke produced in the United Kingdom in order to maintain, and if possible increase, the supply of by-products necessary for the manufacture of high explosives.

The Ministry of Munitions had induced many colliery owners to extend their coking plants, and arrangements had been made for the establishment of new coking concerns, so great was the demand for the by-products necessary in the manufacture of high explosives, especially tri-nitro-toluol. As a result the home demands for coke were more than met with a consequential fall in the price of coke. The fall in price in South Yorkshire may be instanced; this, varying as it did from 15s. to 25s. per ton, resulted in some ovens being worked 'slow', and some had even been shut down.

The total quantity of coke produced in the United Kingdom at this time was at the rate of 20,485,560 tons per annum,¹ that is, between the years 1915 and 1916, of which 3,367,560 tons, or 17 per cent., were obtained from 'beehive' or non-recovery by-product coke ovens. The Committee suggested various palliatives to meet the serious situation which had arisen. By-products being a necessity, the by-product recovery ovens had to be continued at work at all costs even if the resultant coke had in part to be stocked. Such suggestions were considered as an extension in the use of the home consumption of foundry coke;

¹ The figures of coke production for the calendar years 1914, 1915, 1916, and 1917 were as follows:

				<i>At Gas Works.</i> <i>Tons.</i>	<i>At Coke Ovens.</i> <i>Tons.</i>	<i>Total</i> <i>Tons.</i>
1914	.	.	.	7,920,669	11,050,256	18,970,925
1915	.	.	.	8,150,200	11,908,940	20,059,140
1916	.	.	.	8,100,889	13,288,474	21,389,363
1917	.	.	.	8,460,074	13,555,051	21,995,125

e.g. in locomotive and other forced draught firing with or without the admixture of coal; the Government purchase of pig iron and placing to stock; the Government purchase and stocking of coke, the idea being that the Government should guarantee minimum prices for the coke produced from by-product ovens equipped with benzol recovery plant, and this was the course which most strongly recommended itself to the Committee if another recommendation put forward by them, viz. the increase in the export of metallurgical or foundry coke, failed to meet the situation. Acting on the advice of the Coke Committee the Coal Exports Committee not only lifted all restrictions against the export of this class of coke, but in many cases made it a condition to the supply of coal to neutrals that they should take a certain proportion of their fuel requirements in the form of coke. The Coke Committee were able to judge of the effects of this action before they presented their report. They were both immediate and remarkable. The position righted itself, the price immediately responded, and no further action was called for.

It will be obvious, from what has been described, how delicate an instrument was the control of fuel exports and how carefully, especially in the matter of coke, the situation had to be watched and weighed. The Coke Committee reported, therefore, that 'in the best interests of the nation the export of coke and of coking coal should be subject to careful control, and the situation constantly watched, for a rough and ready system of control will not suffice to meet the case'. They suggested that district committees of coke makers should be established to keep in touch with the Ministry of Munitions and advise that Department at stated intervals what amounts of coke each maker in the kingdom had available for export after satisfying the home needs, and that the Ministry of Munitions should advise the Coal Exports Committee accordingly. This course was followed, and no more trouble was experienced in respect of dealing with the coke situation during the continuance of the War.

The Retail Price of Coal early in 1915—Proposed Limitation

Allusion has been made to the findings of the Committee on the Retail Price of Coal (see p. 23). Recommendation V of that

Committee was fraught with far-reaching results, culminating, ultimately, in complete control of the coal-mining industry in the United Kingdom, but this did not come to pass until two years later. The price of coal (more especially the retail price) had been steadily rising in the large towns, London and the south of England in particular. The Committee reported that 'while within the limits of time at our disposal we have taken account of prices generally throughout the country, we have concentrated our attention mainly on London. With some exceptions, the North and the Midlands have not suffered from any remarkable rise in the price of household coal. In the Southern Counties, apart from the additional charges due to the railway rates on a longer haul, prices are governed so largely by London conditions that it is unnecessary for the purposes of this inquiry to deal with them separately. Speaking generally, we have no doubt that the causes which have operated to raise prices in London are also those mainly responsible for the increases in the Southern Counties and elsewhere.'

The following figures relative to the London retail prices of 'Best Derbyshire' coal are illuminating :

<i>Date</i>	<i>Price per ton</i>
	<i>s.</i>
16th June 1914	26 lowest summer price.
26th Sept. „	27
21st Nov. „	28
12th Dec. „	29
19th „ „	30
7th Jan. 1915	31
28th „ „	32
29th „ „	33
17th Feb. „	35

These prices, though deemed high at the time, cannot but be regarded as moderate in the light of more recent experience, and they are prices to the lowness of which we are not likely to return for some time to come.¹

On the 7th June 1915 the Coal-mining Organization Committee was requested by the Home Secretary, at the instigation of the President of the Board of Trade, to consider the desirability of a limit on the selling price of coal. It is worthy of note that

¹ This was written in June 1921.

when the subject first came before the Committee, one of the members, Mr. A. F. Pease (now Sir Arthur F. Pease), a prominent coal-owner, suggested as an alternative a scheme for the limitation of profits rather than of selling prices, any excess of profits beyond this limit to be divided between the State, the coal-owners, and the workmen. This proposal, valuable as it was, went beyond the reference to the Committee. But the President of the Board of Trade stated shortly afterwards that he proposed to fix maximum selling prices of coal, and asked the Committee, through the Home Secretary, for the benefit of their opinion as to the best method of doing this, a draft of a proposed Bill being laid before the Committee.

The Price of Coal (Limitation) Act, 1915

On the 8th July 1915 the Committee reported to the Home Secretary. A copy of this report is given in Appendix II, together with a Minority Report by Mr. Pease. It will be seen that the President accepted in large measure the recommendations of the Committee, and on the 29th of July the Price of Coal (Limitation) Act, 1915, became law. The Act, which was limited to the sale of inland coal, was applicable to England, Scotland, and Wales, but not to coal raised in Ireland.

In connexion with this report, attention should be drawn to the remarkable fact, reflecting great credit on the industry, that both owners and workmen, through their representatives on the Coal-mining Organization Committee, voluntarily recommended the Government to limit prices, thereby limiting the owners' profits and the miners' wages, which were usually based on some form of sliding scale whether recognized as such or not. This was done at a time when both profits and wages were rapidly increasing in almost every industry, great and small, which was ministering to the needs of the War. It was this self-denying ordinance, and the Act of Parliament based upon it, which was mainly responsible for the fact that until towards the end of the War the rise in the price of coal was no greater than it was, and compared favourably with that of certain other necessities.

The sale of coal for export, or for the manufacture of patent fuel for export, or for use on any ship, was excluded.

The limitation of the price was in respect of the price at the pit's mouth. The owner of the coal might be the owner of the colliery or, owing to the nature of the contract between the owner of the colliery and the purchaser of the coal when raised to the surface, might be a merchant or factor. The increase in the selling price of coal was limited by a standard amount of four shillings per ton;¹ the selling price of any coal could not exceed by more than the standard amount per ton the price of the same description of coal sold in similar quantities and under similar conditions on the corresponding date in the twelve months ended the 30th June 1914. But power was conferred upon the Board of Trade to increase the standard amount of four shillings in the case of any class of coal-mines if the Board was satisfied that owing to special circumstances affecting those mines the standard amount should be increased. In sales under the Act the coal-owner, in addition to the maximum of 4s. per ton above the corresponding price at the pit mouth in 1913-14, was entitled to add to the *cost* at the time of sale the charges of railway and other services incidental to merchanting the coal at the *dépôt*. But where the coal was conveyed from the pit mouth over a railway in trucks not belonging to a railway company, the seller of such coal was not entitled to charge for the use of the trucks any sum exceeding by more than 50 per cent. the sum which the railway company conveying the coal was actually charging for the provision of trucks at the commencement of the Act.

This Act was in force from 29th July 1915 onwards throughout the period of control of the industry until the end of March 1921 (see p. 245), when the Act was repealed and Government control ceased.

In May of the same year (1915) the President of the Board of Trade (Mr. Runciman) made voluntary arrangements with the London retail coal merchants whereby the latter consented to limit their prices, agreeing to a maximum margin of profit of

¹ The factors which guided the Coal-mining Organization Committee to the conclusions at which they arrived in regard to price limitations were increased wages and increased cost of materials and the fact that the lower output made for increase in standing charges. Four shillings was found to be about the average of the increased cost throughout the country.

7s. 6d. per ton. This margin covered their gross expenses plus profit, that is, the expenses incurred between the cost of the coal at the depôt up to delivery into the consumer's cellar plus profit. Later on this voluntary system was extended to some of the big towns of the provinces, a letter being addressed to the local authorities throughout Great Britain informing them of the character of the London arrangements and inviting them to make similar arrangements in their own areas.

The Distribution of Coal

Towards the close of the year 1915 the question of the inland distribution of coal became one of pressing importance, numerous complaints having been received by the Board of Trade and the Home Office as to the shortage in the supply of coal for various important industrial undertakings. The Coal-mining Organization Committee decided that the question of the disposal of the available supply of coal was one which came within the purview of the Board of Trade rather than of themselves, and the Chairman of the Committee suggested to the Board of Trade the advisability of dealing with the internal distribution of coal through the medium of local committees of coal-owners, with an overriding or Central Committee composed of representatives of the Board of Trade, Home Office, Ministry of Munitions, Admiralty, Railway Executive, coal-owners, and coal merchants. A conference was held at the Home Office of representatives of the Home Office, Board of Trade, and Ministry of Munitions, as a result of which Mr. Marwood,¹ Assistant Secretary to the Board of Trade, reported to the President on the above lines, and Committees were established in January 1916, the Central Committee being presided over by Mr. Marwood with Sir Richard Redmayne as Vice-Chairman. This Committee was known as the Central Coal and Coke Supplies Committee. At first it comprised eleven members, ultimately increased to twelve, the terms of reference being: 'To consider all questions relating to the distribution of coal and coke that may be referred to it from time to time by the Board of Trade or submitted by the District Coal and Coke Supplies Committees.'

There were eleven District Committees, viz.: (1) Scotland;

¹ Now Sir William Marwood, K.C.B.

(2) Northumberland ; (3) Durham ; (4) Cumberland ; (5) Lancashire, Cheshire, and North Wales ; (6) West Yorkshire ; (7) South Yorkshire ; (8) Nottingham, Derby, and Leicester ; (9) Staffordshire, Warwickshire, and Shropshire ; (10) South Wales and Monmouthshire ; (11) Somersetshire and Gloucestershire. It was the business of these Committees to see that the coal resources of the several districts were utilized to the best advantage and that the requirements of essential and important industries dependent on their respective areas were fully met. The question whether licences for the export of coal and coke could be issued depended largely upon the home demand being satisfactorily supplied, so that the Coal Exports Committee kept in close and daily touch with the Central Coal and Coke Supplies Committee, which was the medium for conveying to the former the views of the District Committees respecting the quantities and qualities of coal available for export. The Central Committee also considered the various recommendations which the District Committees put forward as to greater economy in the use of coal. The industries connected with the War were given precedence in the matter of supply, and this alone involved some interference with the normal distribution of coal. The District Committees from time to time asked for returns as to the distribution of output of the mines within their respective districts. In many districts one of the chief duties of the Committee was to see that supplies were secured for consumers in other areas whose normal sources of supply had failed them. Any necessary adjustment of the kind had to be done at the expense of the export trade.

It will be realized that the Committees had on occasion to divert the output or part of the output of a colliery to a destination other than that originally intended by the owner of the colliery. At the outset the Committees had no legal power of control over supplies, and the question arose as to what protection coal-owners would have against claims for breach of contract where supplies had been diverted. The Board of Trade did not rely on any specific powers in dealing with this question, and they rarely found that such powers were needed. The experience was that coal-owners and consumers alike generally recognized that in the circumstances of the War some interference with the ordinary

course of business could hardly be avoided and that the requirements of industries connected directly or indirectly with the War must have precedence. Difficult questions of priority did arise on occasion, but conflicting claims were on the whole adjusted locally, and interference by the Central Committee and the Board of Trade was seldom called for (see also p. 76).

The Coal Industry during the Year 1915

Although there were signs pointing to depletion in the supply of fuel, the possibility of a shortage did not begin to be generally appreciated nor was any anxiety aroused until just before the year opened, when some people were left without coal. It was this state of affairs which led to the setting up of the Coal Exports Committee, and later to the Coal Distribution Committees. An unprecedented shortage in 'tonnage'—'tonnage' is a term used in the coal industry to denote shipping—characterized the year, but bad as this was it was yet to get worse. Freight rose to a record height, a fact which allowed the United States to compete for the coal trade of certain foreign markets in which hitherto Great Britain had been supreme and to secure Italian business as well as business with Sweden.

Some indication of the rise in prices for coal and freight is given in the figures quoted below, viz. :

<i>Class of coal</i>	<i>Price per ton 1 Jan. 1915</i>		<i>Price per ton Jan. 1916</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Best Northumberland steam coal, f.o.b. Tyne	12	6	22	0
Best Northumberland steam smalls, f.o.b. Tyne	7	3	10	6
Best Durham gas coal	12	6	21	0
Best Durham coking coal	10	6	21	0
Best Durham blast furnace coke at Teeside	19	0	36	0
Best Lancashire house coal at pit	18	0	21	0
Best Yorkshire silkstone coal at pit	16	0	20	0
Best Welsh steam coal, f.o.b. Cardiff	22	0	22	0

Was nominally quoted at 27s. in the middle of year but was practically off the market by the end of the year.

<i>Class of coal</i>	<i>Price per ton 1 Jan. 1915</i>	<i>Price per ton Jan. 1916</i>
Best Welsh steam smalls, f.o.b. Cardiff	12 6	Rose to 20s. by the half year but were not available for export towards the close of the year.
Fife steam coal (navigation) f.o.b. .	12 9	

	<i>1st Jan. 1915</i>	<i>1st Jan. 1916</i>
	<i>s. d.</i>	<i>s. d.</i>
<i>Freights from the Tyne to :</i>		
Rouen	17 0	21 0
Marseilles	21 0	50 0
Genoa	21 6	66 0
Alexandria	22 6	72 6
London	11 6	15 0
<i>From Cardiff to :</i>		
Genoa	17 9	66 0
Bordeaux	11 0	32 0
Marseilles	15 0	48 0
Havre	11 6	21 0
Barcelona	16 0	50 0
Las Palmas	13 0	35 0
Alexandria	19 6	67 6
River Plate	16 3	40 0

The industry of course had by this time reached a state which was largely artificial. This state continued from then onwards throughout the War and for some time subsequent thereto. It was without precedent in the history of the coal trade, the natural laws governing supply and demand being, if not in abeyance, at any rate largely disturbed by Government control of prices and export. It was pertinently remarked at the time by a leading technical journal : ‘ Perhaps for the first time the nation has been brought face to face with the vital importance of coal to the effective conduct of the war, and the intricacy of the machinery by which output and distribution of fuel are maintained.’ (*Colliery Guardian*, 7th January 1916.)

CHAPTER IV

THE YEAR 1916

Rising Costs. — The chief item in the Cost of Production. — Organization necessary in order to secure the supply of Timber for the Mines. — Recruitment of Miners for Military Service. — Further action by the Coal-mining Organization Committee towards increasing production. — Second National Output Conference. — Wages Difficulties. — Taxation of Profits. — Further action taken by the Coal-mining Organization Committee towards the maintenance of Output of Coal. — Suggested improvements in Land Transport and Shipping of Coal. — The Coal Export Trade of 1916. — Economies in the use of Coal. — State of the Coal Trade at the close of 1916. — The Appointment of a Supervisor of Coal Committees. — The Work of the Home Office Inspectors of Mines.

Organization in respect of the Supply of Plant and Material for the Collieries

THE Acting Chief Inspector of Mines, Mr. (now Sir William) Walker, reported in 1916 (see his Annual Report for the year 1915) that the supply of materials to the mines had in the circumstances existing been much better than might have been expected, but he remarked: 'Should the War continue, this will not always be the case. It is therefore very desirable to exercise a proper economy in the case of all materials which in normal times have been brought in ample quantities from abroad.'

In point of the cost of production of coal the item second only in importance to that of wages is plant and material generally. Mines are vast consumers of material—timber, steel rails, and girders; canvas and wooden brattice; pipes for the conveyance of ventilation, compressed air, steam, and water; electric cables; steel wire ropes; explosives and tools, are some of the materials in chief consumption at collieries.

It is, of course, impossible to enunciate any close rule applicable to every colliery for determining the relative proportion of the cost of such items as labour, materials, incidentals, rents, and taxes, as the variation in respect of different collieries is considerable, the conditions being so diverse. The variation, too, is considerable as between coal-fields and even between districts

of the same coal-field, being governed by physical, geological, and mining conditions. However, under normal conditions of trade, the proportion of cost of materials probably varies, on the average, from one-tenth to one-sixth of the total cost as compared with two-thirds of the total cost for wages. Never in the history of British coal-mining has the cost of production soared to such heights as during the late war, and the succeeding two and a half years. Historical parallels are interesting and illuminating, and the nearest approach to the recent and present state of affairs—though the figures are far behind those we are now considering—is to be found in the years 1873-4, which were for long regarded as ‘record’ years, labour and wages costs reaching the highest flood-tide of the last century and probably of any previous century, the immediate cause being the Franco-German war. But it is of importance to note that the recoil was as rapid as the spring had been, and in 1879 the working cost of collieries was in many cases one-half of what it was in 1874. It is not possible to produce a summary of the average costs of production of coal at the collieries in the United Kingdom during the years 1873 and 1874, as general averages were never taken out and the data for the purpose are not now available; but it is possible to give figures derived from the cost sheets of some typical collieries, which it may be interesting to compare with the costs in respect of the whole industry during recent years.

The following are the costs for the years 1874 and 1879 of two collieries, and for the years 1874 and 1876 of one colliery. Nos. 1 and 2 were old collieries; No. 3, a new colliery.

<i>Items of cost</i>	<i>No. 1</i>				<i>No. 2</i>				<i>No. 3</i>			
	<i>1874</i>		<i>1879</i>		<i>1874</i>		<i>1879</i>		<i>1874</i>		<i>1876</i>	
	<i>Per ton</i>		<i>Per ton</i>		<i>Per ton</i>		<i>Per ton</i>		<i>Per ton</i>		<i>Per ton</i>	
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>
Underground labour and screening .	8	5·4	3	0·79	6	3·46	3	5·68	5	3·21	5	4·18
Mechanics . . .	0	11·49	0	4·18	0	11·11	0	4·50	0	5·64	0	6·79
Materials consumed .	2	11·61	1	1·06	2	7·77	0	10·76	1	3·25	0	10·65
Incidentals and taxes	0	3·88	0	2·70	0	3·53	0	2·25	0	1·76	0	2·04
Rents	0	5·66	0	6·00	0	8·00	0	5·28	0	9·00	0	4·18
Total cost per ton at pit mouth	13	2·04	5	2·73	10	9·87	5	4·47	7	10·86	7	3·84

Of course the figures, relating as they do to but three collieries, can only be taken as some indication of the general cost of working and raising coal. A fair average cost of coal into wagons at the pit bank during the period 1905-6 would be about 6s. per ton.

Now let us compare these figures with those obtaining immediately precedent to the War and those experienced in the succeeding years. Taking for the purposes of comparison the year 1913 as the last complete pre-war year, and the year 1917, the first year of control, the estimated costs per ton of coal raised were as follows :

	<i>Pre-war</i>	<i>Nov. and Dec. 1917</i>
	<i>s. d.</i>	<i>s. d.</i>
Wages	5 6	12 0
Stores and pit wood	1 0	3 0
General expenses, including everything except depreciation and interest	1 3	1 6
Total	7 9	16 6

The costs continued to advance, so that for the quarter ended 30th September 1918 they stood as follows :

	<i>s. d.</i>
Wages	13 7·56
Stores and timber	3 6·48
Other costs	1 4·30
Total cost	18 6·34

An interesting and instructive table showing the output and value of coal raised, &c. during the years 1889-1918 and standard and actual output and profits during certain periods of the years 1917 and 1918 was furnished to the Coal Industry Commission by Sir Arthur Lowes Dickinson and is given in Appendix IV.

The great rise in the price of materials consumed at collieries is evidenced by the following figures.

The average annual declared values of imported pit wood or pit props from 1908 to and with 1918 were as follows :

	<i>Per load</i>		<i>Per load</i>
	£		£
1909	1·11	1914	1·32
1910	1·11	1915	2·21
1911	1·17	1916	3·40
1912	1·25	1917	4·27
1913	1·29	1918	4·19

Gunpowder and high explosives, so largely used in mining, had risen respectively as follows :

						<i>Gunpowder</i> <i>Per cwt.</i>	<i>High explosives</i> <i>Per cwt.</i>
						£	£
1913	.	.	.	.	.	2·54	4·74
1914	.	.	.	.	.	2·43	4·75
1915	.	.	.	.	.	3·00	5·85
1916	.	.	.	.	.	3·87	7·90
1917	.	.	.	.	.	3·97	13·90
1918	.	.	.	.	.	4·77	12·92

Oats and beans as well as hay constitute the main food of the horses and ponies employed in mines, and these commodities had also vastly increased in price. Thus oats, which in 1913 were costing 6·25 shillings per cwt., rose to 10·85 shillings in 1915, 18·31 shillings in 1917, and 20·99 shillings in 1918 ; whilst beans, which were priced at 7·38 shillings a cwt. in 1913, stood at 9·35 shillings in 1915, 12·37 shillings in 1916, 19·52 shillings in 1917, and 29·27 shillings in 1918. Clover and meadow hay, the average prices for which were from 71*s.* 6*d.* to 82*s.* and 59*s.* 6*d.* and 68*s.* 6*d.* per ton in 1914, stood as follows in 1915, 1916, 1917, and 1918 :

						<i>Clover hay</i> <i>Per ton</i>	<i>Meadow hay</i> <i>Per ton</i>
						<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
1915	.	.	.	.	.	99 0 to 114 6	81 6 to 95 0
1916	.	.	.	.	.	135 6 „ 155 0	123 0 „ 139 6
1917	.	.	.	.	.	135 0 „ 147 6	131 6 „ 144 0
1918	.	.	.	.	.	152 0 „ 170 0	152 0 „ 168 6

Steel wire ropes, which are used for the hauling of coal along the underground main haulage roads and for winding it up the shafts, had also increased in price between the years 1914 and 1918 ; on the average, in respect of hauling ropes, from 72·2 to 161·6 per cent., and in respect of winding ropes, from 44·4 to 117·4 per cent.

The increase in the cost of these materials was due to the increased cost of production, occasioned, in large measure, by the high rate of wages prevailing and the high cost of fuel. The difficulty in obtaining material was mainly occasioned by the demands of H.M. Forces in the field, with the exception of pit timber (the supply of which was impeded by the shortage of

shipping owing to its diversion in other directions, and, later on, by the German submarine campaign).

It will be realized, therefore, that special organization was necessary to meet the changed circumstances. The arrangements which, after much thought and consideration on the part of the Coal-mining Organization Committee, were arrived at in respect of meeting the needs of collieries in regard to the supply of pit timber are set out in the succeeding pages.

The Question of the Supply of Pit Timber

The importance of an adequate supply of pit timber for the collieries at a reasonable price has been clearly shown in the foregoing pages. The annual consumption of pit timber at mines in the United Kingdom is in normal times about 4,500,000 tons. Of this about four-fifths, valued at about three and a half million sterling, is imported from abroad ; but in 1916 this quantity had fallen to two million loads (a load is equal to about a ton), and the value had risen to nearly seven million sterling. The increase of the average price in 1916 as compared with the pre-war price was in the ratio of 2·87 to 1. Scotland is normally supplied to a large extent with pit timber from her own forests, whereas the coal-fields of England obtain their supplies from Northern Europe ; but large quantities of timber are drawn from France, Spain, and Portugal, more particularly the first-named country, for meeting the wants of the South Wales coal-field. Much of the normal timber trade with Northern Europe—Sweden, Norway, and the Baltic—is intimately bound up with coal export, vessels bringing in timber usually clearing with coal cargoes. This fact was grasped by the Forestry Sub-Committee of the Reconstruction Committee, who in their final report pointed out : ‘ What has happened in the present war, and may not improbably happen again, is that we have been, as a nation, dependent on Norway and Sweden in particular for our timber, and have been forced, in order to obtain it, to use our main economic weapon, coal, with the result that we have been handicapped as far as power to negotiate for other necessary commodities is concerned.’ Our timber trade with France, Spain, and Portugal was also on the basis of the exchange of coal.

The Coal-mining Organization Committee was in possession of this and other information bearing on the subject. Towards the close of 1915 prices had reached a point likely to affect the industry materially unless some controlling influence was interposed. The industry was being compelled to draw upon home supplies to an increasing extent, and to take unseasoned timber owing to the difficulty of obtaining supplies of foreign timber at workable prices. The situation in the early part of 1916 was this :

The price was fully 300 per cent. higher than it was before the War and the supply from Norway, Sweden, and Russia was uncertain, especially in so far as Sweden was concerned. Further, supplies might at any time be cut off.

In view of this situation, and the increasing difficulties of obtaining shipping 'tonnage', the Committee came to the conclusion that it was advisable so to organize the home-grown timber industry that our mines might, to a large extent, be rendered independent of imported timber. Up to this time the home-grown timber industry was in an undeveloped and unorganized state ; in fact, with the exception of Scotland, it was practically non-existent. There had been for a long time a small timber industry carried on in respect of home-grown timber in Scotland, but it was a precarious trade and had to compete in price with imported timber ; furthermore, except in rare cases the timber was not so treated as to render it as suitable for mining purposes as the imported timber. By the beginning of 1916 the mines, especially in Scotland, were drawing largely upon Scottish timber, but the price demanded for it was very high, being only a little less than that of imported timber, nor could the timber merchants assure to the owners of collieries a definite supply. The Committee was satisfied that there was plenty of wood in the United Kingdom available to meet the requirements of the mines for a long period ahead, probably for three years. The main difficulty to be overcome before the home-grown timber trade could be put on a proper footing was lack of cohesion among (a) the forest owners and (b) the timber merchants, preventing full representation of these two parties as a whole. Another difficulty was lack of labour for felling, carting, and sawing up the timber.

Lord Lovat, a prominent Highland owner of coniferous timber and President of the Scottish Landowners' Association, who had for years given close attention to the subject of the growing of pit timber and was an authority on the subject of timber generally, held decided opinions on the subject and informed the Coal Mining Organization Committee that he considered Scotch wood as pit timber as good as Norwegian if felled at the proper time, peeled, and allowed to season.

Accordingly, on the 17th of February a conference was convened by the last-named Committee at the Home Office of representatives of the Board of Agriculture, Board of Trade, forest owners, merchants of home-grown timber, and coal-owners. On this occasion Lord Lovat informed the conference that there was sufficient pit wood in the north and north-east highlands of Scotland, if clean felled, to supply the whole of the mines in the British Isles for at least one year. The great and increasing difficulty, however, was that of the supply of suitable labour. He put forward interesting and valuable figures, which, in view of the interest which the subject of home forestry is at present exciting, it may not be out of place to reproduce. He claimed that at that time (spring of 1916) the growers' profit did not exceed a 5 per cent. return on the capital outlay—an outlay in which was included the cost of planting, fencing, and bushing up (i.e. replanting), the aggregate of which he put at from £6 to £7 per acre. The wood could be cut at the end of 42 years, and, in order to cover all expenses, including that of felling the timber and allowing the owners a 5 per cent. return on the capital invested, £70 per acre would, on the average, have to be obtained, the average output per acre being about 10,000 lineal feet.

On the 29th and 30th March 1916 the Coal-mining Organization Committee met in Edinburgh to confer with representatives of the Scottish coal-masters, forest owners, timber merchants, of the Home-Grown Timber Committee, and of the Royal Scottish Arboricultural Society as to the means whereby the home timber supply could be put to the best possible advantage for pit timber purposes, and to place such timber resources in the market on such terms as would be reasonably profitable to both timber growers and merchants without being exorbitant to the coal-masters.

At a conference of representatives of the Home Office, Board of Trade, and Board of Agriculture, convened by the Home Secretary and held at the Home Office on the 10th of April under the presidency of the Parliamentary Under-Secretary of the Board of Agriculture, the Rt. Hon. Francis Dyke Acland, M.P., it was agreed that a Central Joint Committee to deal with home-grown pit timber should be constituted. This Committee comprised two members of the Coal-mining Organization Committee, two representatives of the Board of Agriculture, and one representative of the Board of Trade. Acting under the advice of the Coal-mining Organization Committee, the Home Secretary divided the United Kingdom into areas for the supply of home-grown timber to all mines within those areas (see fig. 1), and appointed a special Committee in each coal-field area to investigate the position of supplies and provide information for the Central Joint Committee as to the quantity and sizes of pit wood required. Each of these Committees, of which there were eight, was composed of the Divisional Inspector of Mines (Chairman), several coal-owners, one representative of the forest owners' interest, and one representative of the Home-Grown Timber Committee (an organization established under the Board of Agriculture). The timber question *as a whole* was dealt with by the Central Joint Committee, the functions of the local Committees being to review the local requirements, consider how far these could be met from local resources of timber suitable for pit use (whether coal or metalliferous mines), to consider and advise as to the best arrangements for making these resources available, and, in this last connexion, to organize conferences with a view to getting the mine-owners who wanted the timber, and the parties who had it for sale, into touch with each other. These local Committees kept in close touch with the Central Joint Committee and through it with the Home-Grown Timber Committee. Arrangements which were from time to time proposed for making local resources available were first submitted for consideration to the Central Committee. Compulsory powers of acquiring timber for meeting national requirements were possessed by the Government under the Defence of the Realm Regulations, which power could be exercised by Government on the recommendation of the Home-Grown Timber Committee; but neither



DISTRICT PITWOOD COMMITTEES.
AREAS OF SUPPLY.

- | | |
|---------------------------------------------|------------------------------------------------------------------------|
| 1. Scottish Committee. | 5. Lancashire, Cheshire & N. Wales Committee. |
| 2. Northumberland & Durham Committee. | 6. South Wales Committee. |
| 3. Cumberland Committee. | 7. Somerset, Gloucester, & Bristol Committee. |
| 4. Yorkshire, Derbyshire & Notts Committee. | 8. Staffordshire, Warwickshire, Shropshire & Leicestershire Committee. |

FIGURE 1.

under the régime existing at this time nor later, when both coal-mines and timber supplies came under direct control, was it found necessary to resort to these arbitrary powers, though on occasion use was made of the power by holding it *in terrorem* over the head of an occasional recalcitrant timber owner. In cases where local resources were insufficient to meet local requirements the Central Committee considered how far the deficiency could be met from home supplies elsewhere and what arrangements could be made for the purpose.

Returns of the annual requirements (in lineal feet and size of props used) were obtained from all the mines in the United Kingdom and were tabulated at the Home Office, and the particulars relating to the area covered by each local Committee forwarded to that Committee for its information and guidance.

In the work of organizing the home timber supplies the Committee was much handicapped by the lack of proper statistics as to the woodlands of the United Kingdom ; but a woodland map published by the Board of Agriculture was of use, and was provided for the guidance of the local Committees.

The War Office agreed to allocate 1,000 German prisoners in gangs of not less than 100 to the work of felling and cutting up timber.

On the 9th June 1916 the Pit Timber Joint Committee met the representatives of the coal-masters and timber merchants of Scotland in London, and after hearing their respective views and arguments, the Chairman of the Committee, Mr. Acland, was appointed arbitrator in respect of the proposed contracts for supplies of home-grown pit wood to the coal-mines of Scotland, and made his award on the 16th June 1916.

The Recruitment of Miners for the Forces

In June 1915 the question of the continued recruitment of the workers engaged in producing coal and its bearing on output received the anxious consideration of the Coal-mining Organization Committee. The Committee concluded ' that no steps that can be taken to increase the output can make up for the loss in output caused by the continuous reduction that is taking place owing to the depletion of mine labour, and there is no source

from which such labour can be obtained to make up the loss. The Committee feel, however, that the question involved is really one of relative national necessity in relation to the successful prosecution of the War, namely as to whether the demand for recruits is more urgent and of more importance meantime to the country than the maintenance of the output of coal, and this appears to be a question which lies for decision with the Government.’¹ The coal industry stands, as regards labour, on a special footing. The loss of adult male labour cannot be made good by the substitution of women labour, or, except to a very small extent, by the substitution of boys, as is the case in other industries, and, as far as the coal hewers are concerned, the occupation is one requiring experience and skill which can only be acquired by actual work at the face, for which untrained men would not, even had they been available, have been suitable. The production of coal was at this time vital to the country and the Government had to decide whether the time had not arrived at which recruiting should be suspended for a while.

In consideration of these facts the Home Secretary and the Director of Recruiting (Lord Derby), whose office had recently been created, agreed in July that all underground workers and certain classes of surface workers whose calling rendered them indispensable for the production of coal and difficult of replacement should be regarded as ‘barred’ classes of workmen, and the following notice, dated the 8th November 1915, signed by them both, was posted at the pit-head of every colliery in the United Kingdom :

Coal-miners have already joined the army in such large numbers that the supply of coal, which is of vital national interest, is seriously affected. Miners one and all must remember that upon their efforts the success of the country depends, no less than upon the men who are serving with the forces. Those who offer themselves as recruits will only be accepted on the condition that they go back to work in the mines until they are called upon ; they will be given armlets to show that they are willing to obey the call and do whatever will most help their country ; but in the meantime it is vital that they should not desist from producing the coal, without which victory is impossible.

This notice applies to all men who are working below ground, and the

¹ Minutes of meetings of the Coal-mining Organization Committee, 16th June 1915.

following classes of surface workers : Winding Enginemen, Pumpmen, Weighmen, Electricians, Fitters, and Mechanics.

Towards the close of that year the Director of Recruiting promulgated his recruiting scheme applicable to all classes of the community, but not equally applicable. Thus, under this scheme coal-miners were placed within the category of occupations scheduled as vitally important at that time for war work or for other essential requirements, a coal-miner being defined as a man working below ground in a coal-mine or any of the following surface workers at a coal-mine, viz. a winding engineman, pumpman, weighman, electrician, fitter, or mechanic. Under the scheme every man, unless exempted, between the age of 18 and 41, was asked to offer himself for voluntary service in H.M. Forces by attesting ; that is to say, these men attested but were not called up and were starred as being in a ' reserved occupation '. A special arrangement was come to between the Home Secretary and the Director of Recruiting whereby the coal-fields were divided into twenty-three recruiting districts. Tribunals were set up to advise the recruiting officer in each respective district. The local tribunals consisted of an inspector of mines and two assessors, one representing the masters and one the workmen, for the purpose of ascertaining what men could be spared from the pits. The decision whether miners who had volunteered under the Derby scheme and had been attested could be allowed to be called up to join the Forces rested with the Home Office acting on the advice of the Coal-mining Organization Committee. The local tribunals could not of course be left to work out the question each for its own coal-field according to its own light ; the needs of the country had to be considered as a whole and the tribunals had to proceed on general principles laid down by the Home Office—this was equally important from the point of view of the Director-General of Recruiting as from that of the Home Office ; the local tribunals might have been inclined to take too stringent a view as to the number of men who could be spared as well as to take too lenient a view. It was deemed necessary to form an estimate of the existing and prospective needs of the country in respect of coal, the number of men required to produce this amount in the light of the existing position as to absenteeism, &c.,

and the distribution of this number between the separate coal-fields, having regard to the quantities of the various kinds of coal. It was necessary also to consider the question whether men could be spared at all from certain classes or groups of collieries producing coal for specially important purposes, e.g. by-product coke ovens. With directions on these points for their guidance the local tribunals would then be able to deal with the question of releasing men from particular pits without difficulty. They had regard, of course, to the percentage of enlistment from the individual collieries, the question of the retention of particular men whose services were essential to the safety of the continued working of the pits, and so forth.

A Central Court was constituted, consisting of the Chief Inspector of Mines, with the Coal-mining Organization Committee acting as an advisory body, a representative of the War Office attending. Appeals to the Central Court from the local tribunals were limited to cases which raised some important issue.

Instructions were issued to the local tribunals for their guidance, these tribunals having to determine whether a person brought before them was or was not a coal-miner, and whether, in the case of his being a coal-miner, it was no longer necessary in the national interest that he be retained in civil employment. Applications were made to the court by the local recruiting officer, who had the right to be present thereat either in person or by representative, as well as the man in respect of whom the application was made, and his employer or his representative. Witnesses could be heard, but no person as an advocate. In case of dissatisfaction as to the decision, which was communicated in writing to the parties concerned, there was a right of appeal to the Central Court. (See Appendix V.)

This scheme worked with remarkable smoothness and with good results, and remained in force with little alteration until the close of the War. The Military Service Act, 1916, the main feature of which was the substitution of compulsory for voluntary service, had little effect upon the machinery established in respect of recruitment of coal-miners. The provisions of the Act applied to all men employed in coal-mines who had not already attested and who fell within the description given in Section 1 of the

Act,¹ unless (in pursuance of Section 2 of the Act) exempted by the Home Secretary by reason of the work being of national importance. The Home Secretary certified that mining was of national importance. Consequently, in the case of all men working below ground and on the surface and officials in charge of such workers, exemptions on grounds connected with business or employment were granted by the *Colliery Recruiting Courts*, as the erstwhile colliery local tribunals now became, acting on behalf of the Home Office. Exemptions on other grounds came within the province of the local tribunals established under the Act, which had jurisdiction over all classes. Colliery clerks and coke-oven workers were outside the jurisdiction of the Colliery Recruiting Courts.

The work undertaken by the Colliery Recruiting Courts and the Central Court was heavy and continuous, but met the wants of the time ; and it is difficult to conceive of a more satisfactory organization for dealing with the man power of the coal-mines than that recorded above. For those who wish to study more closely the details of the scheme the instructions issued from the Home Office to the collieries early in February 1916 are reproduced in Appendix V A.

The Central Colliery Recruiting Court at its first meeting (20th January 1916) decided what number of suitable miners could be spared for the tunnelling companies for service in France, miners being from the nature of their occupation peculiarly fitted for service in these companies. There were 20 such companies, the strength of each being 250 men. It was estimated that to replace wastage (inclusive of sickness and debility) 8,000 men per annum would be required for carrying out tunnelling on a defensive scale—for offensive tactics a greater number would be required. It was agreed, as a working basis, that 10,000 skilled miners per annum should be enlisted for tunnelling purposes, that no barred men should be allowed to join any other corps,

¹ viz. I (1). Every male British subject who—

- (a) On the fifteenth day of August nineteen hundred and fifteen was ordinarily resident in Great Britain, and had attained the age of eighteen years and had not attained the age of forty-one years ; and
- (b) On the second day of November nineteen hundred and fifteen was unmarried or was a widower without any child dependent on him.

and that recruiting officers should be so instructed. A periodic list was made out in respect of each district. Whilst it was realized that the 10,000 men annually drawn from the mines would comprise men most valuable to coal production, yet the shortage would be made good by the natural annual increment of mining labour.

The voluntary scheme of securing recruits for the tunnelling companies did not result in the success anticipated; but it must be remembered that the voluntary system had already supplied no less than 282,200 men from the coal-mines to the Forces (that is, up to the end of March 1916), or 25 per cent. of the labour employed at the collieries at the outbreak of war, a magnificent testimonial to the patriotism of the miners and a fact which will always redound to their credit; no section of the community did better and few as well, none supplied a better type of soldier and non-commissioned officer. Besides the men volunteering for the tunnelling companies, but in addition to and in spite of the Colliery Recruiting Courts, some few men were still leaving the mines and joining the army. It soon became imperative that, if the output of coal was to be maintained, recruiting of coal-miners would have to be absolutely prohibited; in June the Government adopted this course and decided, further, that all the miners in the ranks of home service units, who were unfit for foreign service, should be returned to the mines as well as such other miners as were in the home units after the 1st August 1916.

Wild statements were made from time to time as to the number of men of military age who had entered the mines with the object of avoiding military service. Certainly up to March 1916, 160,000 persons had entered the coal-mines since the outbreak of war, but investigation showed that these were mainly youths under military age, or old men. However, the coal-mines in public estimation came to be designated, in colloquial language, 'funk holes', and in April 1916, in order to meet complaints in this respect, the Government decided that the cases of single men of military age who had gone into 'reserved' occupations, of which coal-mining was one, since the 15th August 1915—the date upon which the national register was made—should be

specially reviewed. In the case of the coal-mines a special procedure was adopted for the investigation. The Home Office asked the owner of each colliery to furnish to the Colliery Recruiting Court a list of men taken into employment since the 15th August 1915. The court then forwarded these lists to the military representative, who, if he was of the opinion that the case of any man ought to be investigated, in the first instance conferred with the Military Court. If the court agreed that there was a *prima facie* case for investigation, they fixed a date for a hearing, and the procedure laid down was adopted. If the court, after hearing the parties, concluded that any of the men could be released without seriously affecting the output of coal from that particular colliery, they withdrew the certificate of exemption from such a man.

In June 1916, in consequence of the reopening of the group system and the passing of the Military Service Act, 1916, it became necessary for the Colliery Recruiting Courts to consider the cases of those men employed at coal-mines who became liable to military service since the previous lists were drawn up and submitted by the colliery owners, and for this purpose fresh lists were drawn up and the Medical Board travelled through the mining districts to examine the men to see if they were medically fit for service.

The Effect of Recruitment on Output of Coal

The effect of recruitment on output varied as between districts, as the following figures, indicative of the position at the end of the year 1915, show :

<i>District</i>	<i>Percentage difference in output</i>	<i>Percentage depletion of labour</i>
Scottish Division	— 8·6	— 16·5
Northern „	— 10·6	— 25·8
York and Midland	+ 0·8	— 12·2
Lancashire and North Wales . .	— 4·0	— 14·8
South Wales	— 6·0	— 13·4
Midland and Southern	+ 0·4	— 8·9

The question might be asked why could not all the districts have done as the York and Midland and Midland and Southern

divisions did, and have shown an increased output rather than, as a consequence of recruitment, have suffered a reduction. The answer is that the conditions of the districts are entirely different. A reduction of only $10\frac{1}{2}$ per cent. in the output of the Northern district, following a nearly 26 per cent. depletion of labour, is, with its old pits and thin seams, as eloquent of effort on the part of management and workmen as the increase of 0.8 per cent. in output with a labour depletion of 12 per cent. in the expanding York and Midland district with its many comparatively new collieries and thick seams.

Wages, System of Payment, and Variation

Prior to the War the wages of miners were settled within the different districts without reference to national averages or the relation of one district to another. That is to say, there was strict local autonomy. For the purpose of general advances and reductions of wages the districts were the following : (1) Fife and Clackmannan ; (2) West of Scotland ; (3) Northumberland ; (4) Durham ; (5) Cumberland ; (6) The 'Federated Districts' (i.e. Yorkshire, Lancashire, parts of the Midlands, &c.) ; (7) South Staffordshire and East Worcestershire (parts of) ; (8) Forest of Dean ; (9) Bristol ; (10) Somersetshire ; (11) South Wales and Monmouthshire. In respect of each of these districts there was what is known as a 'standard' rate of wages of coal hewers, and percentage advances and reductions were based on the respective standards. But there were variations of wages and customs within what may be termed the sub-districts ; thus as between those constituting the 'Federated' area, and as between the anthracite area and the steam coal area of South Wales. There is, however, no necessity to complicate the narrative with details as to these, no useful purpose would be served thereby, but we shall have occasion to refer from time to time to the eleven districts named above.

The position of the several areas at the middle of the year 1914 and at different periods up to the 1st January 1916 in respect of wages was as follows :

PERCENTAGE OF WAGES ABOVE STANDARDS

	1 July 1914	1 Jan. 1915	1 July 1915	1 Jan. 1916
Scotland . . .	75	75	106 $\frac{1}{4}$ †	118 $\frac{3}{4}$ §
Northumberland . . .	52 $\frac{1}{2}$	47	65*†	78 §
Durham . . .	57 $\frac{1}{2}$	53 $\frac{3}{4}$	68 $\frac{3}{4}$ †	95 $\frac{1}{2}$ ‡
Federated area . . .	65	65	90 $\frac{1}{2}$ †	95 $\frac{1}{2}$ §
South Wales . . .	60	60	77 $\frac{1}{2}$	88 $\frac{3}{4}$ §

The Case of South Wales

There is only one case of wage agreements to which special reference need be made, viz. that of South Wales, as labour troubles in South Wales were the chief cause—though not the only cause—of the imposition of the ultimate direct control by Government of the coal-mining industry of the United Kingdom.

There was in force in South Wales and Monmouthshire a wages agreement known as the 1903 Conciliation Board Agreement, and under the terms of that agreement the minimum wage was fixed at 30 per cent. above the 1879 standard. It was agreed that this minimum wage should be considered as equivalent to an average net selling price per ton f.o.b. of large coal of not less than 11s. 3d. nor more than 12s. 3d., it being provided that the equivalent selling price should be definitely determined forthwith by an independent person. The late Sir David Dale, a well-known coal-owner and iron-master of the North of England, who acted as arbitrator between the colliery owners and workmen in South Wales, had fixed as equivalent to the minimum wage of 30 per cent. a selling price of 11s. 10d., that is to say, a selling price of 11s. 10d. was, in his opinion, required to enable the colliery owner to work his colliery without loss when wages were at the minimum stated.

The 11s. 10d. represented the selling price f.o.b. of large steam coal at the Bristol Channel ports. This arrangement remained in force until 1910, when, under the terms of a new

* This raised the wages to the maximum; the miners, however, contended that they should also receive the balance of the war bonus of 15 per cent., making wages 78 per cent. above standard rate.

† Including the war bonus: in Scotland this was merged in a subsequent advance.

‡ 25 $\frac{5}{6}$ per cent. above the new standard, which was 50 per cent. above the standard of 1879, with a maximum wage of 10 per cent. above the new standard, or 60 per cent. above the standard of 1879.

§ Including the war bonus.

agreement entered into in that year, the minimum was raised to 35 per cent. above the 1879 standard, and the selling price agreed upon as equivalent to this minimum was 12*s.* 5*d.* It was also agreed that, in order to claim advances in wages above 50 per cent. on the 1879 standard, 50 per cent. should be taken as equivalent to an average net selling price of 14*s.* 9*d.* per ton of large coal f.o.b. The expression 'equivalent price' has figured largely in South Wales wages disputes, hence the desirability of an explanation of the term.

The wages of the workmen reached the maximum under the 1910 agreement in June 1913, viz. 60 per cent. above the 1879 standard, and remained at that figure until early in 1915, when, the workmen having refused an offer by the owners of 10 per cent. war bonus, the question was referred to the Prime Minister (the Rt. Hon. H. H. Asquith) from a national standpoint, and he, while deciding that a *prima facie* case had been made out by the workmen for an immediate advance owing to circumstances arising out of the war, fixed the date of application of such advance, viz. the 5th May 1915, but referred the determination of the amount to the districts, and the independent Chairman of the South Wales Conciliation Board, then Viscount St. Aldwyn, awarded the workmen an advance of 17½ per cent. on the 1879 standard.

The 1910 agreement was terminated by the expiration of three months' notice (given by the workmen on the 1st of April) on the 30th June 1915. The owners placed themselves unreservedly in the hands of the Government, and ultimately the President of the Board of Trade (Mr. Walter Runciman) effected a settlement with the representatives of both sides without seriously injuring the susceptibilities of either the owners or workmen. The terms agreed upon were mainly :

- (a) The creation of a 1915 standard by the addition of 50 per cent. to the 1879 standard base rates.
- (b) The fixing of the minimum wage at 10 per cent. above the new 1915 standard (this being equivalent to 65 per cent. of the 1879 standard), and the abolition of the maximum.

- (c) The rates of surfacemen below 5*s.* per day to be advanced to 5*s.* per day, i.e. able-bodied workmen.
- (d) General payment of six turns for five worked to workmen employed on afternoon and night shifts.

Much to the surprise of the British public, on the 15th of July the terms, when put before the men, were rejected by them and the pits were laid idle. The Government thereupon set in operation the Munitions of War Act, 1915, from which the miners had previously been exempted in return for a pledge by their accredited leaders against strikes of this nature. The Munitions of War Act established penalties for striking, and specified a method of compulsory arbitration ensuring prompt decisions upon issues raised. Although the Act by its express terms might not apply to mining, the industry was proclaimed in the area in question on the ground 'that the existence or continuance of the difference which has arisen in the South Wales coal-mining industry is prejudicial to the manufacture, transport, and supply of munitions of war', and this proclamation made the Act applicable. Although the workmen struck work in defiance of the proclamation the Government took no action under the Act.

Finally, however, the Minister of Munitions (Mr. Lloyd George), the President of the Board of Trade (Mr. Runciman), and Mr. Arthur Henderson, M.P. (a representative of labour in the Cabinet) went down to South Wales, with the net result that the miners obtained practically all they originally sought, for they obtained a minimum wage rate of as much as 30 per cent. more than the old minimum—reckoning in terms of the 1879 or old standard.¹ The Munitions Act, therefore, so far as South Wales was concerned, proved a thing of straw. The men returned to work on the 21st of July, pending the drafting by the Conciliation

¹ Reckoning in terms of the old standard, the previous minimum being 35 per cent. on the standard rates of 1879, the new standard rates being 50 per cent. above the old standard it follows that 10 per cent. on the new standard is equal to 15 per cent. on the old one, and consequently the new minimum wage rate is the equivalent of 65 per cent. on the old or 1879 standard. The workmen were at this time in receipt of a war bonus of $17\frac{1}{2}$ per cent., which, added to their maximum of 60 per cent., made the wage rate $77\frac{1}{2}$ per cent. above the 1879 standard. They were, therefore, again reckoning in terms of the old standard, $12\frac{1}{2}$ per cent. above their new minimum, and they were offered other favourable terms.

Board of an agreement setting forth the terms of settlement, any points not agreed upon to be referred to the President of the Board of Trade, a fact which, as a well-known industrial periodical remarked at the time,¹ reached out beyond the circumstances of the day, because it involved decisions upon fundamental principles. 'The whole method of regulating industrial operations, even to the point of suspending existing law or framing new legislation, will ultimately be found involved; and also compulsory arbitration.' The Conciliation Board were unable to arrive at a settlement and the matter was referred to the President of the Board of Trade. On the 23rd of August Mr. Runciman made his award on the points at issue which had been put before him by the South Wales Coal-owners' Association and the South Wales Miners' Federation, by both of which it had been agreed that Mr. Runciman's decision should be final and binding. The miners, however, refused to accept the award. Their leaders came to London and met both the Minister of Munitions and the President of the Board of Trade on the 28th of August, and on the 30th of August the coal-owners had an interview with the two Ministers, when they stated that in order to avoid a stoppage in the coal-field, which was against the interests of the nation at that time, they were prepared to place themselves in the hands of the Ministers. On the night of the 31st of August a settlement was concluded, the demands of the men being granted.

In December 1915 the Chairman of the Conciliation Board, Lord St. Aldwyn, resigned after eleven years' service, and was succeeded by Lord Mackenzie.

In February 1916 the workmen applied for an advance in wages which the independent Chairman declined to concede, and in May they applied for an advance of 15 per cent.; but in consequence of the men not agreeing to a suggestion made by the independent Chairman to owners and workmen, the former refused to allow him to adjudicate, and he resigned. The miners' leaders thereupon asked the President of the Board of Trade to make arrangements for granting an advance of 15 per cent. on wages to operate as from the 1st of June, the establishment of a coal selling price equivalent to the miners' minimum wage, and

¹ *The Colliery Guardian*.

the appointment of a new independent Chairman of the Coal Conciliation Board in place of Lord Mackenzie resigned, with powers to base his awards only on the actual selling price of coal without regard to the increase in the cost of production. To prevent a stoppage the Government conceded the 15 per cent., outside the terms of the Conciliation Board agreement, stipulating that a new independent Chairman should be appointed for the future regulation of wages, and Sir W. Pickford was appointed.

The wage rate stood at 25·83 per cent. above the 1915 standard, and it was upon the increased selling price that the workmen based their claim for an advance, whilst the owners based their claim for a reduction upon the increased cost of production. As has been stated, the Board of Trade, acting through Sir George Askwith, awarded an advance of 15 per cent. There was witnessed, therefore, the curious fact of a Government Department disregarding an agreement which it had itself brought into existence not a year previously, and setting the workmen free from obligations which that agreement had imposed upon them. The owners, who had sought a reduction of $7\frac{1}{2}$ per cent. owing to the increased cost of production, protested against the adoption by Government of any course, in dealing with the general wage rate, that was contrary to the provision of the agreement.

In August 1916 the workmen applied for a further advance of 12 per cent. on the strength of the increase in the average selling price of the coal (see p. 57). The owners, on the other hand, sought a reduction of 15 per cent. on the score of the increase in the cost of production; but the independent Chairman, after inquiry, decided against both claims.

In September 1916 the workmen sought for a 15 per cent. advance, basing the justice of their claim on the fact that the new quarterly accounting period showed a further increase of 7*d.* per ton in the average selling price of coal, although such an increase did not in itself justify a wage increment of even 5 per cent., and they intimated that they would not allow the matter to be settled by the independent Chairman in the usual way. They had a short while previously demanded a joint audit of the books of the owners with a view to determining the actual cost of production. To this the owners had unwisely declined

to accede. The workmen now demanded that the 15 per cent. should be conceded without inquiry and that the audit should take place afterwards.

The difficulty in the situation was the absence of any agreed equivalent to the minimum wage rate. The owners claimed that the increased average price of coal had no meaning so long as the equivalent selling price was not fixed. The miners desired to see the old equivalent re-established, but the coal-owners pointed out the unfairness of this in view of the continually increasing cost of production, asserting that in consequence the old equivalent ought rightly to be increased by the amount of the enhanced cost.

Matters again, therefore, reached an impasse, and on the 29th October 1916 the Government announced that the following regulations had been made under the Defence of the Realm Act, viz. :

1. Where the Board of Trade are of opinion that for securing the public safety and the defence of the Realm, it is expedient that this regulation should be applied to any Coal-mine, the Board may by Order apply this Regulation, subject to any exception for which provision may be made in the Order, either generally to all Coal-mines or to Coal-mines in any special area, or in any special Coal-fields, or to any special Coal-mines.

2. Any Coal-mines to which this Regulation is so applied shall, by virtue of the Order, pass into the possession of the Board of Trade as from the date of the Order, or from any later date mentioned in the Order; and the Owner, Agent, and Manager of every such mine and every officer thereof, and where the Owner of the Mine is a Company, every Director of the Company shall comply with the directions of the Board of Trade as to the management and user of the mine, and if he fails to do so he shall be guilty of a summary offence against these Regulations.

3. It is hereby declared that the possession by the Board of Trade under this Regulation of any Coal-mine shall not affect any liability of the Actual Owner, Agent, or Manager of the limit under the Coal Mines Act, 1911, or any Act amending the same.

4. Any Order of the Board of Trade under this Regulation may be revoked or raised as occasion requires.

and under the new Regulations the Board of Trade made an Order of which the following was the substantive provision :

Regulation 99 of the Defence of the Realm (Consolidation) Regulations, 1914, is hereby applied as from the 1st day of December 1916 until

further notice : to the South Wales Coal-field, that is to say, to all coal-mines in the counties of Brecon, Carmarthen, Glamorgan, Monmouth, Pembroke, and Radnor.

and they directed the colliery firms and companies affected by the Order to carry on as usual subject to any further instructions, the President of the Board of Trade appointing an Interdepartmental Committee representing the Board (Mr. Marwood), the Home Office (Sir R. Redmayne), and the Admiralty (Mr. Jenkins), to advise with regard to directions to be given under the new Order.

The object of the Government in taking over the control of the coal-mines in South Wales and Monmouthshire was, as stated in the House of Commons on the 30th of November, in order to eliminate war profits, to avoid industrial disputes during the War, and to secure the best results from the labour of the mines. It proved the precursor of a more stringent and extended control.

The Interdepartmental Committee alluded to above was seldom called together ; in fact, the present writer can only recall to mind three occasions on which it met. The South Wales coal-owners met the Committee on one of these occasions, in response to an invitation, and submitted their case for a reduction of 10 per cent. in the wage rate. The workmen's representatives protested against sectional control of the coal-fields by singling out South Wales, and accompanied this declaration with the suggestion that negotiations with the Miners' Federation of Great Britain should take place on this point. They declined to meet the Interdepartmental Committee unless the 15 per cent. advance in wages as from the 1st of December was conceded, when they would submit their case. This resolution they made known to the Permanent Under-Secretary of the Board of Trade. The Board of Trade, after consulting the Interdepartmental Committee, determined to appoint an independent auditor to ascertain the facts in regard to the increase in the cost of production of coal in South Wales and invited suggestions as to instructions for the auditor, the letter concluding : ' pending the receipt of the result of this audit, an increase of 15 per cent. in the miners' general wage rate will be paid as and from this date (1st December) ;

but any future adjustments of wages will be contingent upon the result of the audit now to be instituted in conjunction with all other relevant factors.' The advice of the majority of the Interdepartmental Committee had been that the situation should first be ascertained by the independent audit. As the leading organ of the coal-mining industry sapiently remarked at the time, 'it is important to note that this was apparently an act of the Government, not a decision arrived at by the new Committee after investigation of facts and figures'.

Taxation of Profits

Prior to the direct control of the industry the coal-mines, from the point of view of taxation of profits, were dealt with in the same manner as uncontrolled industrial undertakings generally. Under the Munitions of War Act, the Minister of Munitions had power, in the case of 'controlled' establishments, to fix the 'standard amount of profits', and the Chancellor of the Exchequer, in his Budget Scheme, brought forward in the latter part of the year 1915, proposed that in arriving at the pre-war standard of profits the taxpayer should be given the choice of any two out of the three preceding years, and that for these profits there might be substituted profits at the rate of 6 per cent. on the capital. When this was inadequate provision was made to refer such cases to the Board of Referees. Companies were entitled to set off a loss in a subsequent 'accounting period' against profits taxed in an earlier period and to recover from the Treasury. Excess profits, that is profits in excess of the standard profit already referred to, were to be taken in respect of 80 per cent. by Government, 20 per cent. being retained by the company. On the whole, it must be acknowledged that the scheme was just and well conceived, although at the time it was argued in certain quarters that the incidence of the tax was not altogether fair. Thus, for instance, a concern which did bad trade in 1911, 1912, and 1913, and had a normal year in 1914, would have to pay a heavy tax; conversely a concern which did well in 1911, 1912, 1913, and in 1914, inasmuch as it did not happen to be in excess of the average of the two years previous, would not have to pay on excess profits. Again, it was argued, that inasmuch as some

concerns develop out of revenue, that is invest their profits or part of them in new developments—for instance, a concern might pay a fixed rate of dividend and invest all surplus profits in further development—the effect of the tax would be to discourage development out of revenue. These were some of the arguments advanced against the imposition of the tax. But on the other side, it must be observed, the times were abnormal; the effect of the War was to put some branches of industry in a peculiarly profitable position, a fact which was likely to conduce to a state of industrial unrest, and it was unfair to the public generally that any branch of industry should be able to make great profits out of the special circumstances created by the War. On looking back, however, in the light of experience gained from subsequent events, it appears doubtful whether, at any rate in regard to certain branches of industry, of which mining is essentially one (in which if there is not expansion there is retrogression), it would not have been more politic to have recovered the excess of earnings by way of individual income tax, for though the national exchequer would probably at the time have suffered somewhat in respect of receipts it would ultimately have reaped a richer harvest due to the better maintenance of the industry. Of course there had to be taken into consideration the unsettling effect on the employees if unrestricted profits were permitted to the owners; but, as we now know, considerable unrest did exist even under the revised conditions, and at the time of writing many of the colliery owners are ‘high and dry’ for lack of capital, trade is stagnant, and wages falling. The subject is one in respect of which opinions are bound to differ, and as to which it is difficult for an impartial mind to arrive at a definite conclusion.

Under Section 42 of the Finance (No. 2) Act, 1915, it was laid down that in cases where the pre-war standard, viz. average of the profits of any two of the three last pre-war trade years, proved to be less than the statutory percentage standard of 6 per cent. on the capital invested in the undertaking, then this pre-war standard was to be taken to be the percentage standard. It was, however, provided that this statutory limit of 6 per cent. might be subject to alteration in special cases to be adjudicated upon by a Special Board of Referees consisting not of Government

officials but of business men having special knowledge of particular trading conditions.

The coal-owners in the autumn of 1916, through the Mining Association of Great Britain, applied to the Board, via the Inland Revenue, for the raising of the statutory percentage to 12 per cent. in the case of certain collieries upon facts showing that the allowance of 6 per cent. entailed hardships on many of the poorer undertakings. Obviously one would not invest money in such a risky undertaking as mining with the object of securing a return on one's capital limited to 6 per cent. per annum, when one can secure such a rate of interest in much more secure concerns. It was decided by the Board of Referees (appointed under Part III of the Act by the Treasury), in an Order dated the 8th November 1916, that as from the commencement of the Act the statutory percentage as respects the trade or business of mining in Great Britain of coal or stratified ironstone, fireclay, or shale mined with coal or with stratified ironstone, including the manufacture of bricks from such fireclay or shale but excluding the manufacture of coke and other by-products of coal, should be 9 per cent. in the case of a trade or business owned or carried on by a company or other body corporate, and 10 per cent. in the case of any other trade or business.

Mineral Royalties were dealt with by the Chancellor of the Exchequer amending the Mineral Rights Duty, so that he was empowered to appropriate 50 per cent. of what may conveniently be described as excess profits from royalties. The agreement in favour of dealing with royalties in this way rather than by the *Excess Profits Tax* was because of there being so many hands through which mineral rents, royalties, and wayleaves pass. The excess profits tax did not fall on those who worked their own minerals, nor on owners of royalties based upon tonnage, but only on owners of sliding scale royalties, as it was those who chiefly benefited by the rise in the price of coal.

Further Action taken by the Coal-mining Organization Committee towards the Maintenance of Output of Coal

In the nature of things a good part of the work of the Coal-mining Organization Committee could not be immediately productive of results, but in their third, and last report, reviewing

the position in respect of output up to the end of March 1916, there was shown distinct evidence of a satisfactory improvement in production, inasmuch as the downward tendency of output had given place to an increase which, although small, was indicative of still further recovery in the near future.

It is true that the output had been improved, that the production of coal per person employed had been increased (thus the output per person employed during the year 1915 was higher than it had been since the year 1907), but the demand was outstripping the supply. The Committee was informed by the Ministry of Munitions that the demand of the munitions works and controlled establishments for the ensuing year (1917) would be 9 million tons in excess of the year 1914. It was necessary to maintain the export of coal at as high a figure as possible in order to keep up our rate of exchange, to secure revenue, and to obtain necessary goods on the return voyages.

The following balance sheet shows the position in respect of coal at this time :

	<i>Tons</i>
The foreign demand during the year 1913 was	73,400,000
Deducting the quantity normally exported to Russia, Germany, Belgium, Austria-Hungary, and Turkey in that year	18,408,262
	<u>54,991,738</u>
But the requirements of the Allies—France and Italy, was in excess of normal times, France alone requiring 23 million tons as against 12 million normally, and Italy 10 million tons as against 5 normally. Russia had also commenced again to obtain coal from us to some small extent.	
But putting these excess demands at the very conservative figure of .	12,000,000
The total demand for export might be placed at about	66,991,738
But during the previous year 1915 the coal exported was only	43,534,771
	<u>23,456,967</u>
So we may suppose that there was a foreign demand of	23,456,967
Beyond that which it was possible to meet, and adding thereto the extra requirements of the Ministry of Munitions, viz.	9,000,000
	<u>32,000,000</u>
The maximum demand was, say	32,000,000
The actual deficit was	15,000,000

The Committee considered that if they could secure the return of 15,000 miners from the army they could reckon on

	<i>Tons</i>
A further increase in output of	4,000,000
And they looked for a reduction in absenteeism giving	5,000,000
That was to say, the most that could be hoped for from the miners was an additional	<u>9,000,000</u>

leaving an actual deficit of 6 million tons which they considered might and ought to be obtained by economies such as

curtailment in the use of domestic fuel and in the supply of coal to non-essential industries.

It will be remembered that in September 1915 a conference took place between representatives of the colliery owners and the workmen with a view to determining how best to carry out the resolution come to at the great national gathering of owners and workmen convened by the Government a short time previously (see p. 21). Since then the Coal-mining Organization Committee had been in receipt of monthly returns of output and absenteeism at the collieries and had dealt with a great number of individual cases; several mass meetings of miners had been held in mining districts and addressed by miners' leaders. The position in respect of coal supplies became more serious towards the early part of 1916, and the Committee decided that the whole subject ought to be reviewed in the light of the pressing demands both at home and of the Allies. Accordingly the Chairman on the 11th of April addressed a letter to the Secretary of the Miners' Federation of Great Britain, alluding to the gravity of the position and the advisability of reconsidering schemes for the increase of output, schemes which had hitherto been either negatived or the consideration of which had been adjourned.

It was pointed out that the demand for coal for home consumption, owing to the requirements of the munition works, was increasing, whilst that of the Admiralty was as great as ever, and the requirements of the Allies never greater and still on the increase. The export of coal had been reduced to a dangerously low figure in order to meet these increased demands and could not be further curtailed.

The remedies indicated were the further employment of women on the surface of the collieries, the reduction of the age limit in respect of the employment of boys below ground and on the surface of the coal-mines, means for further reduction of voluntary abstention from work, suspension of the Eight Hours' Act, and curtailment of holidays. (For full letter see Appendix VI.)

As the result of this letter a conference between the Executive Committees of the Mining Association of Great Britain and the Miners' Federation of Great Britain was convened by the Coal-mining Organization Committee, and took place at the Home

Office on the 16th May 1916, when it was unanimously decided, as to absenteeism, that the matter be referred to the districts 'on the distinct understanding that Committees will be at once set up in each district to devise and put into operation effective machinery to secure the attendance of all workmen employed to the fullest possible extent and to inquire into the circumstances of workmen employed at the mines not being provided with work when they have presented themselves at the mine'. The question of the further employment of women was left to district action also, with the result that in Scotland and Lancashire and some other districts their employment was extended somewhat, but in South Wales, Yorkshire, and the great northern coal-field opposition to their employment was continued. The curtailment of certain recognized holidays was recommended, but it was realized that the suspension of the Eight Hours' Act would disorganize a system of working that had only with difficulty been established in order to comply with the Eight Hours' Act of 1908. This question, as well as that of the working of one hour extra on sixty days in the year, and the reduction in the age limit in the case of boys employed below and above ground, were left over for consideration at a later meeting.

An adjourned meeting took place on the 22nd of June, at which it was reported that local Committees had been agreed to and formed, and the Conference was further adjourned until the results of the working of these Committees were available.

It was felt that it was quite within the power of the workmen to make good the shortage in output by working full time instead of idling, and that if this were done there would be no occasion to consider the other points.

The Absenteeism Committees, which were set up at nearly every colliery (and in many districts were connected with District Committees, the latter keeping in touch with the Coal-mining Organization Committee), undoubtedly contributed very materially to an improvement in the attendance of the workmen, though they did not achieve all that was hoped of them, probably owing to the fact that in but very few cases were they clothed with sufficient authority, and in most cases were without punitive powers, so there remained only moral suasion as a means for effecting their objects.

The absenteeism, as has been previously stated, was much higher in the case of men engaged in contract work, that is the coal getters (coal hewers) and men engaged in making height¹ at or near the face (brushers or stonemen as they are variously termed) as well as those boys and young men engaged in transporting the coal at the face (putters, trammers, hurriers, as they are variously called in the different districts, who are generally paid by the amount of coal they 'put'). As illustrating this point the following comparative statement in respect of a large colliery may be quoted :

	<i>Hewers and Brushers paid by contract</i>	<i>Underground. On-cost work- men</i>	<i>Surface. On-cost workmen</i>
Average percentage of absenteeism calculated over 15 fortnights, March to September 1914	16·65	5·8	5·6
Average percentage of absenteeism calculated over 15 fortnights, March to September 1915	15·6	6·5	5·1
Average of 2 fortnights, September 1915	18·4	6·2	6·4

Of course, in considering the question of absenteeism in the year 1916, as well as the productive capacity per man employed, it should be borne in mind that the incoming labour, so far as it was not composed of miners' sons or men from other mines, would probably not compare favourably, either in physique or technical efficiency, with that of the miners who had enlisted in the Forces.²

Suggested Improvements in Railway and Shipping Transport

The possibility of improvement in the transport of coal by land and sea engaged the serious attention of the Coal-mining Organization Committee, as collieries had during 1915 been standing idle at intervals for lack of both forms of transport. The magnitude of the difficulties with which the railway management had to contend, and the probability that these difficulties would be increased in the near future by reason of military

¹ That is, cutting the stone forming the floor or roof of the coal seam so as to permit of the passage of the coal tubs used in transporting the coal.

² A second great national conference of coal-owners and miners was held at the Central Hall, Westminster, on the 25th October 1916 and presided over by the Home Secretary (the Rt. Hon. Herbert Samuel, M.P.), the gathering being addressed by the Prime Minister (the Rt. Hon. H. H. Asquith, M.P.), Mr. Adam Nimmo (President of the Mining Association of Great Britain), Mr. R. Smillie (President of the Miners' Federation of Great Britain), and others. It was generally agreed that the deficient output could be made good by more regular attendance at work, and that it was the duty of those present at the meeting—both masters and men—to see that this was done.

exigencies, were fully realized. Transit facilities were being materially affected by lack of available locomotive power, a state of affairs which would become worse as the movement of troops and munitions of war increased. The Committee, therefore, set about considering how far relief could be obtained in the direction of reducing the amount of work requiring to be undertaken by the locomotive power likely to be available for dealing with the coal traffic, and concluded that considerable advantage would result from a system of pooling of traders' and railway companies' wagons in different districts. It was recognized that the value of such a proposal would depend upon the simplicity and efficiency of the system of pooling that might be adopted, and that, if possible, the proposed system should be adopted with the concurrence of the coal-owners and other interested parties in different parts of the country. It was recommended, therefore, that without delay the Railway Executive should be advised to prepare a scheme of pooling suitable to the different districts, and that it be submitted to the coal-owners and others for their consideration in the national interest. This proposal was put forward by the Committee early in December 1915, but by the end of June 1916 little had been done. Nothing had been done towards putting into effect a scheme for pooling privately-owned wagons. Great opposition was evinced by the owners of privately-owned wagons, and the Railway Department of the Board of Trade concluded that it was not advisable to proceed further in the direction recommended by the Coal-mining Organization Committee. As regards railway companies' wagons, the Great Northern, the Great Eastern, and the Great Central Companies had pooled their wagons some time previously, and more recently the London and North Western, Midland, North Eastern, Great Western, and to some extent the Lancashire and Yorkshire Railway Company, had followed suit. The results in these cases were very good, and the three principal Scottish companies which serve the coal districts of Scotland also decided to pool, and pressed, without avail, that the traders' wagons should be included in the pool. Collieries, however, continued to experience from time to time, particularly in Scotland, great difficulty in getting their coal away.

It was regrettable that complete pooling of wagons was not proceeded with. In the United States of America a system of

complete pooling was carried into effect without delay when that country entered the War, and what was possible in America was surely possible in Great Britain? The difficulties inherent to the many vested interests could have been surmounted and should not have been allowed to stand in the way of national interests at a time when the nation was fighting for its existence.

The lack of shipping tonnage at the South Wales ports had, especially during the latter part of 1915 and onwards, operated adversely on the coal trade of that district, for, owing to the physical character of the country, at few collieries in South Wales is it possible to stack coal. This scarcity of tonnage was due to several causes, among others being :

- (a) The requisitioning of vessels by the British and French Governments for naval and military purposes.
- (b) Delays in discharging at foreign ports owing to the state of congestion prevailing there.
- (c) British vessels working between foreign ports owing to
 - (1) high freights which could be earned thereby ;
 - (2) less risk of being requisitioned by the Admiralty.

The Coal-mining Organization Committee did not regard itself as so constituted as to judge how far this situation could be improved by some form of control being exercised over shipping, but they considered that, without prejudice either to international considerations or to the other carrying trade of the country, ships might be compelled to trade between home and foreign ports in the best interests of the coal industry and the commerce of the United Kingdom generally, and they recommended the subject as one calling for inquiry by the Board of Trade. This question is so bound up with that of the export coal trade that the two may fitly form the subject of a separate paragraph.

The Export Coal Trade, 1916

The desirability of a statutory limitation of freights on the lines of the Price of Coal (Limitation) Act was early in the year 1916 present in the minds of many thinking business people. At the commencement of the War we had 11,353 vessels of a capacity of over 400 tons ; of these early in the spring of 1916 450 were

lost by acts of war and 340 by normal attrition due to shipwreck, fire, and condemnation. Freights, as has been shown, had risen rapidly. The rate for wheat from the River Plate may be quoted as an instance : it had risen from 57*s.* 6*d.* to 157*s.* 6*d.* per ton, a fact not surprising when it is remembered that, apart from the shortage of tonnage, ocean-going steamers may consume as much as 80 tons of coal per diem on the trip.

The Government had to consider what would be the effect of a limitation of freights upon the commercial interests of the nation, and what its influence upon the effective prosecution of the war—two points which were really one. In view of these facts and considerations, well might the President of the Board of Trade (Mr. Runciman) describe the shipping question as ‘ the greatest economic problem ’ that the country had to face at that time, and to its importance it is probable that no section of the community was more alive than the coal shipper and coal-exporting colliery owner. At this time—towards the close of 1916—it was not deemed prudent to embark upon any complete system of shipping control.

In May of that year, acting on the suggestion of the President of the Board of Trade, the coal exporters of Great Britain appointed a Committee to formulate proposals and assist him in carrying out a scheme, which he had outlined, as to the limitation of the prices of coal to France, for the prices had reached such a figure as to compel the French Government to point out that the high cost was embarrassing their industries and pressing severely upon private consumers. It will be remembered that the Price of Coal (Limitation) Act, 1915 (see p. 34), never applied to coal for export. Already the President of the Board of Trade had made arrangements in respect of freight rates (so that these approximated to those ruling on the 8th of March), subject to the reduction of 20 per cent. to come into force on the 1st of June 1916, and to apply to all neutral as well as allied vessels in the French coal trade. The French Government agreed to appoint one buying agent in each coal district for all French requirements so as to avoid indiscriminate competition between buyers on the French account. Finally the terms agreed to were made operative as from the 1st June 1916. Briefly the

principle adopted was to add a fixed amount to a certain pre-war price. It was, of course, difficult to adopt any uniform scale of adjustment to suit the variable conditions in different coal-fields, but by acting on a give-and-take principle a fairly just and workable schedule was arrived at of maximum prices for all classes of coal throughout the country for export to French ports. Under this scheme local Committees consisting of coal exporters were set up in the various coal districts, and through them the orders for coal to France were distributed. The scheme, with occasional modifications in respect of prices, necessitated by the altered circumstances of the trade, continued in operation throughout the War and worked well in practice, individual interests being in the main subordinated to the work of maintaining the supply of coal to France.¹

The vessels of neutral Powers presented an obvious difficulty, a large proportion of them being engaged in trading to and from British ports. But it was possible to deal summarily with them by refusing them bunker coal in all ports within the British Empire unless and until they conformed to the arrangements made in respect of our own vessels.

Neutral shipping was largely dependent upon British coal for bunkering, and neutral ships were largely compelled to bunker at British coaling stations throughout the world, a feature of which

¹ Early in July 1916 the Coal Exports Committee informed the public that on and after the 6th of July all applications for licences to export coal, coke, and manufactured fuel to France and French colonies and dependencies must be made through the local Committee of the district from which the shipment was to be made.

The local Committees were six in number, viz. :

Cardiff District	The Mersey District
Swansea „	The Tyne „
The Humber District	Scotland.

The importation of coal, coke, and patent fuel into France being now controlled by the French Government acting through the Bureau des Charbons at the Ministère des Travaux Publics at Paris, exporters before applying for licences to ship coal to France had to ascertain whether the necessary authorization for the importation thereof had been obtained by their consignees or buyers, and the licences issued for the export of coal to France after the date named were general licences rated for periods of from one to three months. Exporters holding any valid licences, whether general or special, on the 6th of July for export of fuel to France were informed that they must on or before that date report particulars to the local Committee concerned, specifying the balance remaining to be shipped under special licence. These requirements were applicable to all coal, coke, and manufactured fuel intended for France, including any that might be intended to be shipped under contracts made prior to the 25th May 1916.

use was made to persuade neutrals to conform to our national interests, especially with regard to the Baltic trade. A 'black' list was kept of those neutrals who were trading with the enemy, and coal was denied them whilst so engaged. 'Coal pressure' proved a most valuable lubricant in diplomacy in dealing with neutral Powers during the War, as Viscount Grey showed in his reply in November 1916 to a protest from the United States of America. He stated that it gave Great Britain a means of enforcing what might otherwise have appeared to be a mere empty threat. The Government had very properly decided that firms on the prohibited list should be excluded from the use of British coal. There was no reason why we should permit our own coal to be used to assist the enemy, but every reason why we should not. 'It was', he said, 'British coal; why should it be used to transport the goods of those who are actively assisting our enemies?' And he reminded the United States of her own action, very similar in kind if differing in degree, taken during the Civil War in the case of vessels proceeding to certain ports.

The case of the supply of coal to Italy presented the most difficulty. Italy, it will be remembered, came into the War on the side of the Allies on the 27th August 1916.¹ The importance of the question of supplying her with coal was second only to that of France, and in September a similar method of limitation was arrived at.

*Suggestions adopted or advanced for securing Economies
in the use of Coal*

Allusion has already been made to the suggestions put forward by the Coal-mining Organization Committee with the object of securing some reduction in the consumption of coal at home and so allowing of the essential demands being, if not entirely met, at any rate approximately so. Some economies were actually effected, but never to the extent which was possible. As early as July 1915 the Home Office advised the Government, in connexion with the reduction in output of coal contemplated by the Coal-mining Organization Committee, that, should such

¹ Italy declared war on Austria-Hungary on the 23rd May 1915, and on the 27th August 1916 a state of war was declared to exist with Germany.

reduction occur, the difficulties brought to the notice of the Department by correspondents who complained of the great increase in prices, short deliveries, and hindrances to the work on munitions in certain cases, would be greatly enhanced, and that it might become necessary—in order to ensure that the industries whose activities were essential, not merely for the maintenance of our export trade but also in order that the supply of material and power for munition work should not be hindered by lack of coal—that the entire distribution of the coal raised in the United Kingdom should be controlled by the Government, and that this would be a very large task. The purpose of control would be to enforce economy in the use of coal in non-essential industries and in households, so as to have the most abundant supply possible for essential industries. They stated that whether such a supervision could be effectively arranged in the time available was doubtful.

The high price of coal had enforced a considerable measure of economy in some directions, not all of which were desirable. Thus the extended use of water-gas to reduce the cost of operation of gas undertakings, while it involved a small consumption of coal, involved also the loss of the by-products of coal distillation.

One of the outcomes of the action taken by the Home Office was the establishment by the Board of Trade of the Coal and Coke Distribution Committee, to which reference has already been made (see p. 36), and its subsidiary Committees, but, as has been seen, this organization did not actually undertake the rationing of coal. In so far as the domestic consumption of coal was concerned, that was inaugurated at a later date by the Controller of Coal-mines (see p. 110). Differentiation as between essential and non-essential industries, and the entire cutting off of coal supplies to the latter, were never attempted.

The Chairman of the Coal-mining Organization Committee drafted a series of 'Hints to Householders', pointing out how economy in the use of coal might be practised in the home. A million of these were printed and distributed by the Parliamentary War Savings Committee, in the form of a leaflet, but it is doubtful whether this conduced very greatly to achieving the object aimed at. General self-denial in the unnecessary

use of coal, as in respect of other forms of self-indulgence, is rarely secured by preaching only.

It had for some time been strongly felt by the Coal Distribution Committee, as it had been by the Coal-mining Organization Committee, that drastic action was necessary to secure economy in the use of coal at home. The Coal Exports Committee had been for long developing 'coal power' upon neutrals with considerable success, and it was felt that the time had arrived to apply it to ourselves and thereby secure (*a*) Economy in coal and greater exportable surplus; (*b*) reduction of personal luxury without any sumptuary laws; (*c*) (possibly) better work from the miners and less risk of strikes. These feelings took definite shape in the form of a memorandum by Commander Fisher (an Admiralty representative on the Committee), in which he suggested that the Board of Trade should write a letter to the local Committees directing them to arrange that the supply of coal to retail merchants should be cut down by 10 per cent.; another to retail merchants, informing them that the supply of domestic coal would be cut down by a general average amounting to this figure, and requesting that every effort be made to secure a moderate supply to every household and pointing out that large economies could only be effected at the expense of well-to-do households; and yet another letter to the railway companies requesting them to co-operate with the coal merchants by refusing to carry coal consigned to private persons—a line of action which it was absolutely necessary to take in order to prevent unscrupulous rich persons from evading the control of the merchants. It was also recommended that a Daylight Saving Bill should be introduced into Parliament. The present writer and Commander Fisher also circulated to their colleagues on the Committee their considered views in the following memorandum:

1. Coal is one of the most important diplomatic weapons we possess. The surplus for export for this and other obvious reasons should therefore be as large as possible. The time has arrived to treat the distribution scientifically. Appeals for economy are practically useless.

2. Government to assume control of the entire Coal output on Naval, Military, and diplomatic grounds, which it is understood can be done under the Defence of the Realm Act, as in the case of other commodities. This need not mean 'taking over the mines' or further limitation of profits.

3. Government to delegate to the District Coal Committees (reinforced, if need be, by representatives of the Home Office, Admiralty, or Ministry of Munitions and under supervision by Board of Trade and/or Central Coal Committee) power to allocate output, which means leaving it alone, except as mentioned below, particularly in paragraphs 6 and 7.

4. District Committees' control (by veto or by imposing conditions) to be exercised over all sales by colliery owners, *except* the following :

- (a) To Admiralty and other Departments of Government, or
- (b) To 'Controlled Establishments', in which case it is for the Ministry of Munitions to enforce economy.
- (c) For export, in which case the existing powers of the Coal Exports Committee are enough.
- (d) To consumers appearing on lists notified by the Central Committee to the District Committees, e. g. firms engaged on Munition contracts or other essential work, but not coming within (b) and in the first instance. .
- (e) Coal for colliery consumption, including workmen's coal.
- (f) Coal for household consumption—a more difficult problem, which in view of the advent of spring, can be worked out later on.

5. Compulsory Coal economy to be enforced by reducing or refusing supplies to unnecessary manufactures or other unnecessary consumption, but not so far as to interfere with manufacture for export.

6. For instance, supplies of coal, light, or electric power to the following might be greatly reduced: Cinemas, Music Halls, and Theatres; Sweetmeats, Cake and Biscuit Factories; Brewing (except in case of Anthracite), and manufacture of Mineral and Aerated Waters and teetotal drinks; hothouses for orchids, peaches, grapes, tomatoes, &c. (except in case of Anthracite); Newspapers and printers; certain textile manufacturers, &c.

7. Such reduction to be effected in the case of a sale by a colliery owner direct, under paragraph 4 above, and in the more usual case of a merchant or factor intervening between Colliery and Consumer, by the Coal being supplied to Merchants and Factors on the terms of certain 'Conditions of Supply' providing for the refusal or percentage reduction of supplies in certain notified cases. In the same way coal would be supplied to Light and Power Companies and undertakings on similar conditions as to the supply by them of Light and Power.

8. This proposal is strongly in the interest of Coal-masters and exporters as it would increase the exportable surplus. The District Committees would probably not err on the side of enforcing it too lightly, and Consumers would have to look to the Central Committee to protect their interests.

9. *Suggested Advantages* : (a) Economy in Coal and greater exportable surplus; (b) reduction of personal luxury without any sumptuary laws;

(*c*) reduction of unnecessary labour; and (*d*) (possibly) better work from the miners and less risk of strikes.

10. The procedure would be by Order in Council under the Defence of the Realm Act.

In March 1916, Mr. W. F. Marwood, C.B.,¹ the Chairman of the Central Coal and Coke Distribution Committee, issued an appeal through the Board of Trade on the subject of economy in fuel, which was published in the press, and a request was made to the leading editors to popularize the idea of economy in coal consumption as a war measure. Articles appeared in most of the newspapers on the subject, and some ministers of religion took up the matter and made it the subject of pulpit discourses to their congregations. A letter was also addressed by the Board of Trade to all railway companies, municipalities, and chambers of commerce urging that every possible economy in the consumption of coal, whether as fuel or for purposes of power, light or transport services, not really essential to the business needs of the country, should be effected without delay.

The Committee agreed to the introduction of the Daylight Saving Bill, and some two months later the Bill was passed through Parliament, meeting with very slight opposition.

The Committee adopted a resolution that they 'either directly or through the District Committees should have power to divert the coal supply into such channels as they deem desirable in the best interests of the nation, and to prohibit delivery to such consumers as they may find necessary, and that inquiry should be instituted as to what the proper legal procedure should be to secure this'.

The Central Coal and Coke Distribution Committee also informed the District Committees that in general the order of urgency of the requirements of the various classes of consumers might be taken to be as follows :

1. Admiralty (supplies for fleet and transports).
2. Railways (home supplies for current consumption).
3. Munition works (home), including coke ovens, blast furnaces, steel works, shipbuilding, &c.
4. Railways—France and Italy.

¹ Now Sir William Marwood, K.C.B.

5. Munition works—France and Italy.
6. Public utility undertakings at home.
7. Public utility undertakings in France and Italy.
8. Bunker depôts abroad and bunkers in the United Kingdom.
9. Domestic and general industrial consumption at home and abroad.

It was stated that such a list could only be in the nature of a general guide, and that in particular cases it might frequently be necessary to depart from the above order. It was hoped, however, that in the absence of special circumstances the list would afford some guidance to the District Committees in deciding the relative importance of conflicting claims.

The question arose as to the position of contracts in view of the above recommendations. The Committee therefore recommended the insertion of a clause in future contracts which should safeguard the seller. It read :

‘During the continuance of the present War the sellers may from time to time be required to supply to or for the Government or to particular consumers for purposes connected with the War in such quantities as to interfere with the deliveries which should be made under this Contract note, and such requirements will be notified in writing signed by two members of the Central Coal and Coke Supplies Committee and countersigned by an Assistant Secretary to and on behalf of the Board of Trade, or will be notified by the Director of Navy Contracts or his duly authorized deputy, on behalf of the Admiralty. In the event of supplies under this Contract note being reduced in consequence of any such requirement, the amount by which such supplies are reduced during the period when they ought to have been delivered shall be deemed to have been mutually cancelled.’

The District Committee for Scotland, realizing that, in view of their request for coal-owners to transfer a considerable quantity of coal from export to home industries, the coal-owners might thereby fail to carry out their engagements and probably incur financial responsibility, suggested to the Board of Trade that consideration should be given to existing contracts. The Board replied :

‘The Board realize that in order to carry out the directions of your Committee, it may be necessary for Colliery Owners in some cases to reduce or suspend deliveries under existing Contracts, but in view of the

evident shortage of certain quantities of coal in Scotland they feel confident that the necessity of retaining larger quantities for home consumption will be recognized by all concerned, and that buyers will be disposed to waive what they may regard as their legal rights when they might conflict with national interest. Should difficulties occur in any case, the Board will be glad to render such assistance as they can.'

Up to June 1916 the District Coal and Coke Distribution Committees had supervised the distribution of coal, in order to secure supplies for munition works and other important consumers without specific statutory powers. Difficulties occasionally had arisen owing to the fact that a direction from one of these Committees did not in itself give a legal authority for the suspension of deliveries under a contract. It was found necessary, therefore, to make express provision for protecting a contractor who had been directed to divert his coal in the national interest, so a regulation was made by Order in Council, under the Defence of the Realm Act, on the 27th June 1916, making it lawful for the Admiralty or Army Council, or the Minister of Munitions, or any person authorized by them to act in their behalf, after consultation with the Board of Trade, to give directions as to the priority to be given in the execution of orders or contracts for the supply of coal or coke with a view to securing precedence for orders or contracts in accordance with their national importance.

Mr. Charles Merz, the highest authority in Great Britain on the generation and transmission of electrical energy, discussed with the writer means which might be taken to effect a considerable saving of coal in the generation of electrical power during the continuance of the War. His attention had been called to the circular of the Board of Trade inviting municipal and company electric supply undertakings to reduce the amount of current consumed; but he, very rightly, pointed out that it is not possible to reduce consumption unless the power users' productive output is curtailed, and he drew attention to the fact that the main portion of the output of most of the electric supply undertakings in the country is used for power, traction, or similar purposes, and not for lighting, especially since the advent of the metallic filament lamp. He considered, there-

fore, that the object desired should be approached by arranging, wherever feasible, a system of interconnexion and joint working—in the national interest and as quickly as possible—of the different electric power supply stations of the United Kingdom. In explanation of this suggestion he instanced the fact that, owing to well-intentioned but most mistaken legislation at the end of last century, the electric supply areas of the United Kingdom were settled by Parliament, not from the point of view of what would be the most economical way of supplying the country with electrical energy, but according to existing municipal and parish boundaries. This fact, coupled with local jealousies and prejudices, had hitherto largely prevented that interconnexion of electric supply areas (whether municipal or company-owned) which should exist. The result had been most unfortunate as regards (a) economy of coal, (b) economy of capital expenditure, (c) security of supply. He said: ‘while to reorganize completely the electric supply systems of the country on correct lines is a lengthy matter (though eventually it will have to be done), a considerable amount can be accomplished throughout the country with very little expenditure.’ He suggested that if the Board of Trade were to issue a notice to all the supply undertakings of the country informing them that they expected this matter to be seriously considered and dealt with as quickly as possible in the national interest, beneficial results would follow. Thus, if the power stations were interconnected and the running of such stations properly arranged, the following results would ensue:

1. Except at times of heavy peak load, only the economical plant need be run.
2. At night and at week-ends a large percentage of the stations could be shut down entirely with consequent improvement in load factor for the others.

And further, taken as a whole, larger loads could be dealt with, a matter of great importance at the time in question.

At the request of the present writer, Mr. Merz met the Committee and put his views before them, with the result that his suggestions were adopted, and the Board of Trade issued a circular

on the lines put forward by him. Undoubtedly the carrying out of this recommendation was the means of effecting a saving of many thousands of tons of coal during the remaining period of the War, as well as effecting the other objects mentioned by Mr. Merz.

Economies in coal were also effected by the Home Office acting on the advice of Lord Milner in regard to the lighting of shops. All shops, subject to a few exceptions, were closed during the winter months at 7 o'clock on days other than Saturday or the weekly half-holiday, and at 9 o'clock on Saturday. The chief exceptions allowed were for the sale of meals, of newly-cooked provisions for consumption off the premises, of medicines and articles required in the case of illness, and of newspapers. An extension to 8 o'clock instead of 7 was also allowed in the case of barbers and hair-dressers. The order did not apply to the sale of intoxicating liquors, which were otherwise regulated. The order came into operation on the 30th October 1916. It did not apply to Ireland, where the lighting restrictions were not operative, and where the economy to be secured would have been inconsiderable.

State of the Coal Trade at the Close of the Year 1916

The coal trade, as has already been remarked, had reached a purely artificial state, which condition prevailed throughout 1916, so that the real position of the industry could not be appreciated nor its future tendency forecasted. The limitation of prices of coal for French ports, which came into force in May, and for the Italian ports, which came into force in September, had the effect, of course, of lowering prices so far as those countries were concerned.

The Coal Exports Committee had on several occasions placed an embargo on the shipment of unscreened coal to neutrals, fearing a shortage in the supply of small coal to munition works at home. They had prevented, too, the use of coal of coking quality as a steam coal on ships.

The excessive costs of running vessels, and the abundance of profitable charters available for a restricted number of vessels

unappropriated by Government, caused freights to rule very high, in some cases as high as 400 per cent. and in others 600 per cent. above pre-war rates.

The Price of Coal (Limitation) Act had been successful in maintaining a fairly fixed maximum pit-head price of coal in so far as the home trade was concerned, but during the first half of the year there was a rapid advance in export prices due to a variety of causes, among which may be mentioned the sparing issue of licences and dearth of ships, but chiefly, of course, to the requirements of neutrals and the Allies being in excess of the supply. In September the coal-owners agreed to a limitation of the price of coal to Italian and French Mediterranean ports on a basis similar to that arrived at in the case of France (see p. 73), on the understanding that the ship-owners also consented to some variation in the scale of rates. This arrangement, and that made in May in respect of coal supplied to France, caused a decline in the average export price during the latter half of the year. In June the Board of Trade added 2*s.* 6*d.* per ton to the price of coal drawn from the South Wales area as a set-off against the excessive working costs; which action incidentally precipitated the crisis which led to the whole coal-field being taken over by the Government.

The following tables of comparative prices of some of the principal classes of coal, and of freight rates per ton in respect of shipment of coal from the Tyne and Cardiff to the principal coal ports, will give some idea of the range and variation in respect of price of exported coal and of freights :

PRICES OF COAL

<i>Class of coal</i>	<i>Average price per ton</i>					
	<i>1 Jan. 1916</i>		<i>1 July 1916</i>		<i>1 Jan. 1917</i>	
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Scotch steam coal, f.o.b.						
Glasgow	21	6	25 0 to 30 0		19 6 to 24 0	
Best Northumberland steam coal, f.o.b. Tyne	22	0	50 0 „ 52 6		29 0 „ 30 0	
Best Northumberland smalls, f.o.b. Tyne	10	6	31 0 „ 32 6		17 0 „ 17 6	
Best Durham gas coal, f.o.b. Tyne	21 0 to 22 0		35 0 „ 36 0		25 0 „ 27 6	
Best Durham coking coal, f.o.b. Tyne	21	0	32 0 „ 35 0		18 0 „ 20 0	

Class of coal	Average price per ton					
	1 Jan. 1916		1 July 1916		1 Jan. 1917	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Best Durham blast furnace coke, f.o.b. Teeside . .	36 0		42 6		37 0 to 39 0	
Best Yorkshire silkstone at pit	20 0 to 22 0		30 0 to 32 0		20 0 „ 22 0	
Welsh steam coal. Best sorts off the market :						
Welsh No. 3, Rhondda large, f.o.b. Cardiff	23 0 „ 24 0		45 0 „ 48 0		28 0 „ 30 0	
Welsh special foundry coke	42 6 „ 45 0		62 0 „ 65 0		62 6 „ 67 6	

FREIGHTS

	1 Jan. 1916		1 July 1916		1 Jan. 1917
	s. d.	s. d.	s. d.	s. d.	s. d.
Tyne to :					
Rouen	21 0		46 0		49 0
Marseilles	50 0		87 6		63 6
Genoa	66 6		90 0 to 92 6		64 6
Alexandria	72 6		110 0		62 6
London	15 0		12 0		16 0
Cardiff to :					
Genoa	66 0		70 0 to 75 0		59 6
Bordeaux	32 0		34 0		37 0
Marseilles	48 0		45 0 to 72 6		58 6
Havre	21 0		22 6		23 6
Barcelona	50 0		62 6 to 65 0		60 0
Las Palmas	35 0		47 6		37 6
Alexandria	67 6		90 0		82 6
River Plate	40 0		45 0		62 6

In describing 'the situation that has to be met' the Coal-mining Organization Committee concluded their third and final report (dated the 1st September 1916) with these words :

'We have alluded previously in the Report to the increased demands of the Ministry of Munitions and the Allies. Export of coal has been reduced to a dangerously low figure.

Thus, for the year 1913 . . . 73,400,168 tons were exported

1914 . . . 59,039,800 „ „ „

1915 . . . 43,534,771 „ „ „

The action taken by the Government in stopping recruiting of coal-miners, the curtailment by the miners of holidays, and the abandonment of stop days, and the more regular attendance at work, have undoubtedly resulted in a marked improvement in output ; but these measures alone are not sufficient to meet the case.

'Absenteeism is capable of much greater reduction, and we are doing all we can to secure such reduction, but a considerable improvement in

this direction would not make good the deficiency. We are convinced, as indeed we have been from the commencement of our inquiries, that if the legitimate requirements are to be fully met, economies must be practised in the consumption of coal.'

The Appointment of a Supervisor of Committees dealing with Fuel

The production, distribution, and export of coal were, as has been seen, under the observation, and to some extent the direction, of three Committees; the subject of production of coal coming within the purview of the parent Committee—the Coal-mining Organization Committee—the inland distribution of coal being the subject of the Central Coal and Coke Distribution Committee, whilst the Coal Exports Committee controlled the export of coal, and, as compared with the two preceding Committees, was clothed with the greater executive power. The necessity for some supervision and co-ordination of these bodies, each of which to a great extent worked independently of the others, soon became obvious, and the best way of bringing this about was to appoint a head over them all. Accordingly, at the request of the Government, Lord Milner, in September 1916, undertook the task of Supervisor, and although his position carried with it no executive power, he was instrumental in further promoting the work which it was the object of these Committees to perform, and in the prevention of the overlapping of functions. His method was, through a consultative body consisting of the Chairmen of the several Committees, to keep in constant touch with and direct the work of the Committees, and to attend, as and when he deemed desirable, the meetings of the Committees. He also got into direct touch with the representatives of the colliery owners and workmen, and discussed with them several of the most pressing problems affecting the coal-mining industry.

The Work of the Home Office Inspectors of Mines

No review of the industry during the period of partial control—or what has come to be termed the pre-control period during the War—would be complete without some reference to the valuable work performed by H.M. Inspectors of Mines, who acted during the existence of the Coal-mining Organization

Committee as its agents in the provinces. It will be remembered that the Committee in question was set up by the Home Secretary, and it was arranged that the inspectors, by a system of reporting, should keep the Committee in close touch with what transpired in the several inspectorial divisions. The staff consisted of a Chief Inspector, a Deputy Chief Inspector, and an Electrical Inspector of Mines, all stationed at the Home Office, and, for the purposes of mines inspection, the United Kingdom being divided into six divisions, each division was under the charge of a Divisional Inspector, under whom were one or more Senior Inspectors (in some cases three Senior Inspectors), five or six Junior Inspectors, three sub-Inspectors, a sub-Inspector of Quarries, and one or two inspectors of mine horses; the total inspectorate comprising about ninety persons, the inspection of mines and quarries being carried on daily.

The fortnightly reports which were instituted during the war period, relative to the state of the industry in the several divisions, proved of the greatest value to the Committee, and it was through the medium of this able and experienced body of men, as well as through the Mining Association of Great Britain, the Miners' Federation, and the local branches of these bodies, that the Committee was able to keep its hand on the pulse of the industry and mark and deal with its passing phases. Such matters as possible difficulty in the supply of material to the mines or of coal to industrial undertakings (during the year 1915, before the creation of the Coal and Coke Supply Committee), and incipient labour troubles, by being dealt with promptly and in their early stages were prevented from assuming difficult and possibly dangerous proportions. Labour troubles especially, in a number of cases, were prevented from materializing into strikes by the parties to the dispute being asked to appear before the Committee and the matter in dispute being thoroughly thrashed out before a body of experienced men representative of both sides—owners and workmen—acting as a sort of tribunal.

The work of the inspectors in relation to recruitment of miners for the forces and the supply of pit timber for the mines was especially important, but, as they are dealt with from time to time elsewhere in the pages of this work, need not be referred to here.

SECTION II

THE PERIOD OF GOVERNMENT CONTROL

CHAPTER V

THE YEAR 1917

Early consideration of the question of full Government Control. — The Appointment of a Controller. — Organization. — The Coal Mines Control Agreement and Confirmation Act. — The effect of the Submarine Campaign.

Fall of the Government and the Coming of Control

IN December 1916 the Asquith Coalition Government fell, being succeeded by another Coalition Government with Mr. Lloyd George as Prime Minister. Shortly after his accession to office there were inaugurated a Ministry of Labour and Controllershops of Food, of Shipping, and of Coal-mining. The schemes of these controller-shops and the advantages and disadvantages accruing therefrom had been under consideration for many weeks. Indeed, in respect of the coal-mining industry the present writer had early in September 1915 prepared a memorandum on the subject for the Home Secretary as follows :

The main objects to be secured by Government control of collieries, a course only justified by the exigencies of the War, are :

1. The regulation of the working of the collieries so as to secure the largest possible output of coal.
2. The more effective distribution of coal.
3. The regulation of the selling price of coal.
4. The prevention of unrest amongst the workmen.

It was difficult to see how Government control of the working of all the collieries would ensure larger outputs, seeing it is to the

interest of the colliery owners to secure this under ordinary conditions. General control by a Government Committee or Committees—in the sense that a board of directors exercises control—appeared to the writer to be impracticable at that time. The work of such Committee or Committees would have been tremendous. Such a scheme might be feasible were the mining industry permanently taken over by the Government, but most difficult were the control to be exercised during the War period only. Not only would the regulation of individual collieries have to be considered, but, in addition thereto, the interrelation of collieries—a matter outside the purview of mining boards under normal conditions. Control of a limited area (e. g. the ‘Admiralty’ collieries of South Wales) was open to the objection that were one area controlled by Government it might probably occasion unrest in other districts which were uncontrolled, and it would be exceedingly difficult to so control a part of a whole: there would be a reflex action in other areas.

As to the second point, namely the more effective distribution of the coal produced, it was doubtful whether the objects which would be secured in this respect by Government control were sufficient in themselves to warrant the exercise of such control before the second half of 1916.

Considering items 3 and 4 together. With regard to Government control with the object of securing the regulation of the selling price of coal, that object had already been effected to some extent by the Price of Coal (Limitation) Act, that is, in so far as coal used on land within the United Kingdom was concerned, and it was possible to devise a scheme to meet the case of exported coal—in fact one had been drafted by the Chairman of the Coal Exports Committee—and the case of coal used in home shipping could be met by an extension of the Price of Coal (Limitation) Act. The effect of these measures would be further to reduce profits, and though there still would be room for the accumulation of considerable profits by colliery owners, the necessity in such circumstances for the limitation of profits would not be so urgent as heretofore.

No doubt *direct* control of profits would appeal more strongly to the workmen and conduce in a greater degree to the prevention

of labour unrest than a system of *indirect* control, and were some such scheme of direct control as the writer has outlined below adopted, it would probably be well to impose merely an *ad valorem* tax on exported coal, regarding the term *export* in the strict sense. The tax might be differential (i. e. differential as between the British Empire, Allied, and neutral countries).

If a scheme of Government control in respect of profits was embarked upon, it would not be fair to put the profit on a tonnage basis, as what might be a good profit in the case of a colliery which had been cheaply sunk and developed (or, say, one worked by day levels) would give a poor return in the case of a colliery the opening of which, on account, say, of the natural (physical and geological) conditions, had necessitated a large outlay. To make output the determining basis of profit would also be unfair for another reason, namely inasmuch as those collieries which had provided the largest number of recruits for the army would be penalized to the greatest extent. Nor would it be equitable to limit profit to a percentage of capital, as in many cases owners have managed their collieries on the principle of amortizing their capital and on developing the property out of revenue instead of dividing all the net profits, consequently the capital of a given concern may stand at a very low figure as compared with the actual value of the colliery in normal times, or as compared with what has actually been expended upon it. Some colliery undertakings have cost more than they are worth, or some may have been floated on the public at exorbitant figures. The only fair method is to institute a comparison of the profits earned over a given period when abnormal profits did not rule; such a period would be the three years preceding the 30th June 1914.

The profits might be (*a*) gross profit, or (*b*) net profit, i. e. profit after making provision for depreciation and renewals. The methods of making up accounts differ in different cases, but the controlling factor in arriving at abnormal profits should be that the accounts are made up in the same manner for both periods. Probably the simplest way would be to take gross profits. The greatest difficulty in the way of putting such a scheme into effective operation is the case of those collieries the coal from which is used to supply iron, steel, or other materials at works

under the same ownership as the colliery, the works being in combination with the colliery undertaking and forming an integral part thereof. In such cases the owners might be given the option of (a) bringing the whole of the different works under the scheme, or (b) of fixing the price of coal for both periods at a figure slightly below market value (a colliery owner is generally willing to accept a slightly lower price per ton from a customer who takes large quantities of coal and guarantees that his requirements are constant and regular). Again, there has to be considered the case of the colliery that is just commencing to work profitably. In such a case the extent that the existing profits exceeded what they would have been in normal times would have to be settled by an estimate made by the body established to undertake the investigation of profits. But most of such cases would be covered if it were provided that no profits should be considered abnormal which were below an agreed figure. The case of a colliery which, even under the then existing enhanced prices, was being worked at a loss was obviously outside the scheme.

It might be urged, against a scheme of control of profits, that it was open to the objection that a colliery owner might sell his coal to himself or to a partner at such a price as would allow his colliery returning to him the maximum profit permitted under the scheme, but at a price much below that at which he would have sold it had profits been uncontrolled, and by a secret understanding receive back part of the difference, that is, obtain a commission on the sale. (This objection might be met by allowing to the colliery owner a percentage of the profits after they had reached the standard, but unless the workmen secured a certain part of this increased profit, the suspicion that the colliery owners were reaping undue profit would remain in their minds.)

But such 'double-dealing' would be sure to be discovered in the process of time, and any one so acting should be subject to some sort of penalty.

Again, the scheme might create an inducement to the colliery owner to undertake heavy development work and show in consequence a reduced profit. The ultimate effect of this would of course be to increase ultimate profits, an effect which might not become apparent until a post-control period. Such a case would

be met by the Committee of Control, who would adjudge what were in fact fair gross profits. It would be necessary to set up a Commission or Board of Control and Appeal to decide how the limitations should be applied, and so forth, such a body to consist of accountants and mining men of wide experience, and, possibly, of Government officials.

Right or wrong, these were the views held by the present writer, and the views which he put before the Government on the 17th September 1915, and, about a year later, before Lord Milner, and early in 1917 before the President of the Board of Trade (Sir Albert Stanley).¹ As will be seen, they were in large measure adopted by the Government when direct control was established in February 1917.

That Government control of key industries was a necessary evil in the exigencies of the Great War no thinking person will doubt, but probably it could have been better effected at its initiation and more easily dispensed with when the time arrived for its dissolution, if, instead of a Controller, the Government had set up a small Board of Experts, of the kind specified by the writer in his scheme, presided over by an independent chairman. The success of the Coal-mining Organization Committee was due to its being so constituted. Many of the difficulties experienced by the Coal Controller could have been avoided by investing the Advisory Board, which was actually established, with greater powers than it was given and by its being a board in permanent session in London during the War.

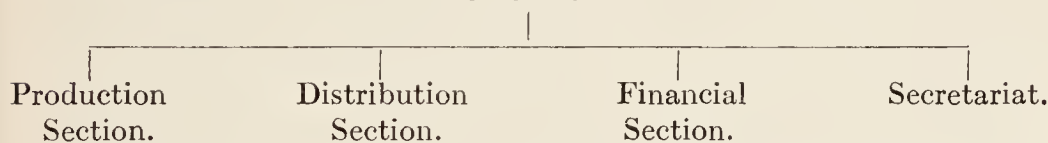
That the miners themselves did not at first welcome the advent of control, being suspicious of what was entailed thereby, was evidenced by a resolution adopted by the Executive of the Miners' Federation of Great Britain on the 20th December 1916, viz. 'That the Executive views with the utmost concern the declaration of the Prime Minister that the Government contemplate taking control of the whole of the mines of the country, and before any definite action is taken we ask the Prime Minister to grant an interview to the Executive Committee at the earliest possible date'. But when they came to realize its full function and powers their view completely changed.

¹ Now Lord Ashfield.

Organization of the Control

The gentleman appointed by the Government in February to fulfil the office of Controller was Mr. Guy Calthrop,¹ General Manager of the London and North Western Railway, a man eminently qualified by attributes of character, administrative ability, and wide business experience gained in railway management at home and in South America, to undertake so onerous and exacting an office—as far as it can be undertaken by one individual—as that of control of the second greatest industry of the kingdom. Mr. Calthrop entered upon his new duties at the beginning of March and was at once busily engaged in getting to close quarters with some of the essential features of the coal industry. Amongst others he was occupied in tracing the whole of the consignments of coal from the pit to the consumer, and in analysing a mass of statistical information which he proceeded to collect. The present writer had been requested by the Government to assist the Controller as his Technical Adviser, and acting in accordance with the wishes of the Controller he drew up the constitution of the control as follows :

The Controller.



An *Advisory Board* was set up, consisting, in the first instance, of ten members, five being representative of the colliery owners' interests and five of the workmen's, but ultimately it was increased to fourteen members.² Mr. Arnold D. McNair, barrister-at-law and a lecturer at the University of Cambridge, was Secretary to the Board (as well as Chief Assistant to the writer).

A fifth and important section was added to the Controllorship

¹ Afterwards Sir Guy Calthrop, Bart.

² Namely Sir Francis Brain, Sir Thomas Ratcliffe-Ellis (Law Secretary to the Mining Association of Great Britain), Sir F. Jones, Bart., Messrs. H. Bramwell, C. E. Rhodes, Sir Adam Nimmo, K.B.E., Mr. (afterwards Sir) A. F. Pease, all of whom represented the coal-owning side ; and Messrs. R. Smillie (President of the Miners' Federation of Great Britain), H. Smith (Vice-President, Miners' Federation), S. Walsh, W. Straker, V. Harts-horn, S. Roebuck, T. Ashton (Secretary of the Miners' Federation), representing the miners' side.

during the year, namely that of *Coal Rationing*, under the direction of Mr. F. Pick.

The Coal Mines' Control Agreement

Compensation to Colliery Owners. An agreement was worked out between the Controller and his advisers and the Consultative Committee (a large body of colliery owners and others interested in the coal-mining industry, which included the members of the Advisory Board) in the summer of 1917, being signed on the 17th of July, relative to the compensation to be paid in respect of the control of coal-mines and other matters arising out of the control. This agreement was confirmed and given effect to by an Act known as the Coal Mines' Control Agreement (Confirmation) Act, 1918, and became law on the 6th February, 1918. This was a most complicated and involved document and very difficult of comprehension, but an endeavour will be made to express the main features of the agreement in simple and intelligible language.

It was agreed that :

1. Subject to the right of the Controller at any time to take over in whole or in part the management of all or any of the undertakings, these were to continue under their existing management.

2. The Controller could discontinue at will the control of any undertaking or part thereof, except in the case of a mine or part thereof which had been closed down by his direction.

3. A profit standard was fixed in respect of each undertaking, it being open to the colliery owner to select in respect of such standard the profits earned in any one of the three years preceding the War. This return was guaranteed to him during the period of control, provided he worked up to a standard output (that is, the annual average output during the standard period); but where the output of an undertaking in any accounting period (i. e. the 'accounting period' under the Act) was less than the standard output, but was equal to 65 per cent. thereof, the profits standard was reduced by a percentage equal to three-quarters of the percentage of the reduction of output. Where the output was less than 65 per cent. of the standard output, then the profits standard

was subject to such reduction as might be fixed by the Controller, and might be a sum varying according to output. Provided that

(a) So far as the decrease in output was due to any action of the Controller which was not common to the whole of the coal industry under his control, the 'guaranteed standard' was to be calculated at a rate per ton of output, regard being had only to the tonnage which could have been raised and the comparative cost of raising it had there been no such action by the Controller, and the guaranteed standard was to be greater than that which would have been fixed if the rule for ascertaining the guaranteed standard in the case of an undertaking where the reduction of output was 35 per cent. or less applied, so, however, that in no such case the guaranteed standard exceeded the amount which would have been the guaranteed standard if the reduction of output had been 35 per cent.

(b) And if the decrease in output was due to any other causes, the guaranteed standard was less than would have been fixed if the said rule applied, being calculated at a rate per ton of output, regard being had only to the tonnage raised and what it would have cost to raise such tonnage.

(c) In either case, if a mine was closed, the guaranteed standard did not include any sum in respect of the cost of maintaining the mine in a state of repair or of reopening it, or any rent, royalties, wayleaves, management, or other similar charges.

4. Eighty per cent. of all profits over and above the standard or guaranteed profit were paid to the Inland Revenue similarly as in the case of the excess profits of other concerns. Of the remaining 20 per cent., the Coal Controller retained 15 per cent., which constituted the pool from which he drew the wherewithal to meet any deficiencies that might arise in respect of the guaranteed profits of any undertaking; the remaining 5 per cent. was retained by the colliery owner as excess profit, technically known as 'coal-mines excess profit'.¹

¹ Thus was begotten the idea of the pool, of which so much was heard during the

5. Composite cases required special treatment ; for example, a concern which included, say, coke-oven by-product works or blast furnaces and foundries. In such cases the profits standard for the undertaking was a standard determined in respect of so much of the profits or losses ('negative standard') as could properly be attributable to the colliery part of the undertaking, the apportionments being made by the Commissioners of Inland Revenue with a right of appeal by the colliery owner.

6. If the Controller was satisfied in respect of any undertaking that there was no profits standard (e. g. the case of a recently opened colliery, which not having reached the production stage at the time of the agreement, there were no profits on which to base a standard), or that the profits standard ascertained under the Act could not fairly be applied, he had power to fix for the purpose of ascertaining the guaranteed standard a '*special standard*' as a substitute for the profits standard, a sum equal to the average annual profits *which might have been* actually earned during the standard period (*a*) had the undertaking been worked under similar conditions in all respects (excluding conditions due to the war) to those under which the undertaking was being worked in the accounting period, and (*b*) in the case of an undertaking which, either in respect of the whole or the part thereof, was, in the standard period, in course of development, and if it appeared that the undertaking would have been run at a loss, the sum fixed might be a negative quantity.

7. In any case of hardship, where a fair substitute for the profits standard could not be fixed in accordance with the foregoing arrangements, the owner could apply to the Controller to fix a substitute without any regard to these provisions and such as he deemed fair in the circumstances. The owner had power of appeal to the Board of Referees if he was dissatisfied with the substitute fixed by the Controller. But the Controller had power to refuse an application for a 'substituted standard', and his decision in such cases was final.

first half of the year 1921, a pool whereby the poor collieries were to be assisted and kept going at the expense of the richer collieries ; the ultimate effect of which would be that the cost falls on the consumer and in the last resort on the general public in the form of taxation.

8. The colliery owner had to give to the Controller not less than sixty days' notice of his intention to close or abandon a mine, and if the Controller directed, before the expiration of that period, that the mine (or part thereof) was not to be closed or abandoned, the mine (or part thereof) had to continue to be carried on in accordance with the directions of the Controller, and the guaranteed standard applicable to the undertaking was revised by agreement, or, failing agreement, by the Board of Referees, being fixed at such an amount (positive or negative) as would, under the operation of the pooling arrangement, indemnify the owner against any loss caused to him by his carrying on the mine (or part thereof) which he would not have suffered had he closed the mine (or part thereof).

If the closing or abandonment of the mine (or part thereof) was permitted, and it did not constitute the whole undertaking, a revision in the guaranteed standard of the remainder was necessary and had to be agreed upon between the Controller and the owner, or in default of such an agreement, the Board of Referees.

9. In respect of the reopening of mines in order to provide for the expenses of maintaining (including rent, royalties, wayleaves, management, and other charges), or reinstating, when reopened, any mine (in any district or group of districts) which had been closed by the directions of the Controller—so far as such expenses remained unprovided for after all refunds of excess profits duty (arising through such expense of maintenance and reinstatement) had been exhausted—it was agreed that the Controller should from time to time, on the application of any association of coal-owners in any district or group of such associations, make a levy on the owners of all colliery undertakings under his control in such district or districts at such a rate per ton on the output to be specified in particular cases; the proceeds being paid into a fund under the control of the Controller, who, on the application of the association or associations in question, would pay to them such sums as were from time to time certified by them as being required for the purpose named. The output on which the rate per ton was made was that of the last completed calendar year before the levy was made; but at the end of the period of control the Controller

was bound to make such adjustments as were necessary to make the total amount paid by the several owners such as would have been payable had each levy been made on the average annual output during the period of control.

If there remained a surplus in the pool described in paragraph 4, such surplus was to be applied by the Controller to reimbursing the fund created by the above-mentioned levy to the extent of 40 per cent. of the amount paid out thereof.

If there was a balance standing to the credit of any association or group of associations in the levy fund after meeting all expenses, it became the property of the association or group of associations.

If at the end of the period of control the purposes for which such fund were created had not been fully satisfied, the administration of the fund was to be carried on by such person as the Board of Trade might appoint.

10. No dividends were allowed to be paid or loans repaid without the sanction of the Controller.

11. In case of dispute arising in respect of the agreement as to any matter in which the decision of the Controller was not stated to be final, the question was to be referred to an arbitrator appointed, as to England, by the Lord Chief Justice; as to Scotland, by the Lord President of the Court of Session; and as to Ireland, by the Lord Chief Justice of Ireland.

12. The agreement came into operation: (a) in the case of South Wales and Monmouthshire, in respect of the collieries taken over by the Government on the 29th November 1916, as from the 1st December 1916; (b) in the case of mines controlled under the Order of the Board of Trade, dated the 22nd February 1917, as from the 1st March 1917; and could be determined by the Controller on or at any time after the 1st October 1917.

Such an agreement was, of course, legally binding only on the signatories thereof, and might have been repudiated at any time by any other coal-owner if so minded; consequently, in order that it might be made binding on all persons whom it affected or purported to affect, it was expedient that it should be confirmed by Act of Parliament, and this was done on the 6th February 1918. By this Act:

- (1) Coke ovens and by-product plant were excluded from the agreement.
- (2) Payments into and out of the Controller's account and 'all other matters relating to the administration of that account and to the money standing to the credit of that account (including the investment of any such money)' were to be regulated 'in such manner as the Treasury may direct'.
- (3) At the end of every financial year accounts of receipts and expenditure had to be made up in such form as the Treasury directed, and audited by the Controller and Auditor-General as public accounts and laid before Parliament with a report thereon.
- (4) The agreement, 'if not previously determined', was to cease to have effect at the expiration of six months after the termination of the War.

The Submarine Campaign

Almost simultaneously with the appointment of a Controller of Coal-mines, there appeared two new difficulties, namely that of the provisioning of the mines with material necessary for carrying them on, more particularly in respect of pit wood and the food-stuffs for the horses and ponies, and the intrusion of a serious obstacle in the way of our export trade—the intensification by the enemy of his submarine warfare.

In October 1916 the German submarine-cruiser warfare against Great Britain and her Allies produced embarrassing effects on our economic situation. Owing, however, to the great improvement in our defensive measures against this form of attack, the adverse results after a time considerably diminished. Our enemies were only prevented from entering upon a campaign of unrestricted submarine warfare, that is a complete blockade of the Allies, by the fear of bringing in against them America, Holland, and Denmark, but, as General Ludendorff naïvely remarks in his *War Memoirs* (vol. i, p. 314), 'after our victories in Rumania, G.H.Q. no longer expected that either Holland or Denmark would enter the War against us. It was, however, unwise to take any risks; the unrestricted campaign could obviously not be begun

before the Rumanian campaign was at an end. . . . It also seemed plain that we should have to hold our hands to see, first, whether any success would be achieved by the intervention of President Wilson on the lines on which our Government had invited it in September, and also the effect of our own offer of peace.' By the end of the year the German Government had 'lost its earlier anxiety as to the attitude of Holland and Denmark, and none was felt as to Switzerland, Spain, Sweden, and Norway. On the other hand, it was regarded as practically certain that the United States would come into the War against us.' But as it was realized that it would be many months before the latter could collect, equip, and transport a considerable army to the scene of hostilities, it was resolved to 'take the risk' of rupture and possibly of war with the United States, and on the 16th of January Bernstorff was so informed.¹ The enemy was confident that a campaign of unrestricted submarine warfare would have decisive results within six months; that 'the loss of freight space and the reduction of oversea imports would produce economic difficulties in England that would render a continuance of the war impossible'. How this wished-for consummation on the part of the enemy was rendered nugatory in so far as the question of fuel was concerned is shown later on in these pages.

Unrestricted submarine warfare was entered upon by both Germany and Austria as from the 1st February 1917, and continued without intermission until the 20th October 1918, when it was abandoned.

So alarming was the destruction of the world's shipping that the provision of ships became the principal problem of the War. It was a race between destruction and construction. The policy of the Controller of Coal-mines was to reduce the dependence of the coal-mining industry on ships to the minimum by drawing as far as possible upon home resources for material, making a ton of coal go as far as possible and freeing for military service as many men as could be spared under the altered and altering circumstances.

¹ *My War Memories*, by General Ludendorff, vol. i, p. 319.

CHAPTER VI

THE YEARS 1917-18

(1) THE INLAND DISTRIBUTION OF COAL; (2) PRICES AND PRICE CONTROL

The Transport of Coal Order.—Rationing of Coal.—The Household Fuel and Lighting Order.

(1) THE INLAND DISTRIBUTION OF COAL

The Coal Transport Scheme

EARLIER in this work allusion has been made to the difficulties in railway transport incidental to the exigencies of the War (see p. 70), difficulties which had become so acute towards the end of 1916 as to necessitate the finding of some method of economizing transport.

Early in March (1917) the Controller of Coal-mines addressed a special note to coal-owners, factors, and merchants, pointing out to them the necessity of refraining from making forward contracts for longer periods than three months. He said: 'It is becoming urgently necessary that special efforts should be made to relieve the congestion of transport on the railways, and with this in view the need for limiting the scope of future commitments will be obvious to all concerned.' It is estimated that of the total output of coal from the United Kingdom about 42,000,000 tons per annum are carried by rail for home consumption (anthracite included).

In pursuance of the powers conferred by the Defence of the Realm Regulations, the Controller of Coal-mines issued an Order, dated the 4th of July of that year, having for its object the effecting of economies in transport and facilitating the supply of coal. This Order, and the directions drawn up by the Controller, are given in full in Appendix VII.

This new scheme, which was chiefly the result of patient investigation and careful deliberation on the part of Mr. S. H. Hunt,¹ the head of the Coal Supplies Section, and constituted

¹ Commercial Assistant to the Manager of the L. & N.W. Railway.

one of the most drastic and far-reaching pieces of organization affecting the United Kingdom during the War. It came into operation on the 10th September, and was estimated to effect a saving in the transport of rail-borne coal in Great Britain of no less than 700 million ton-miles per annum.

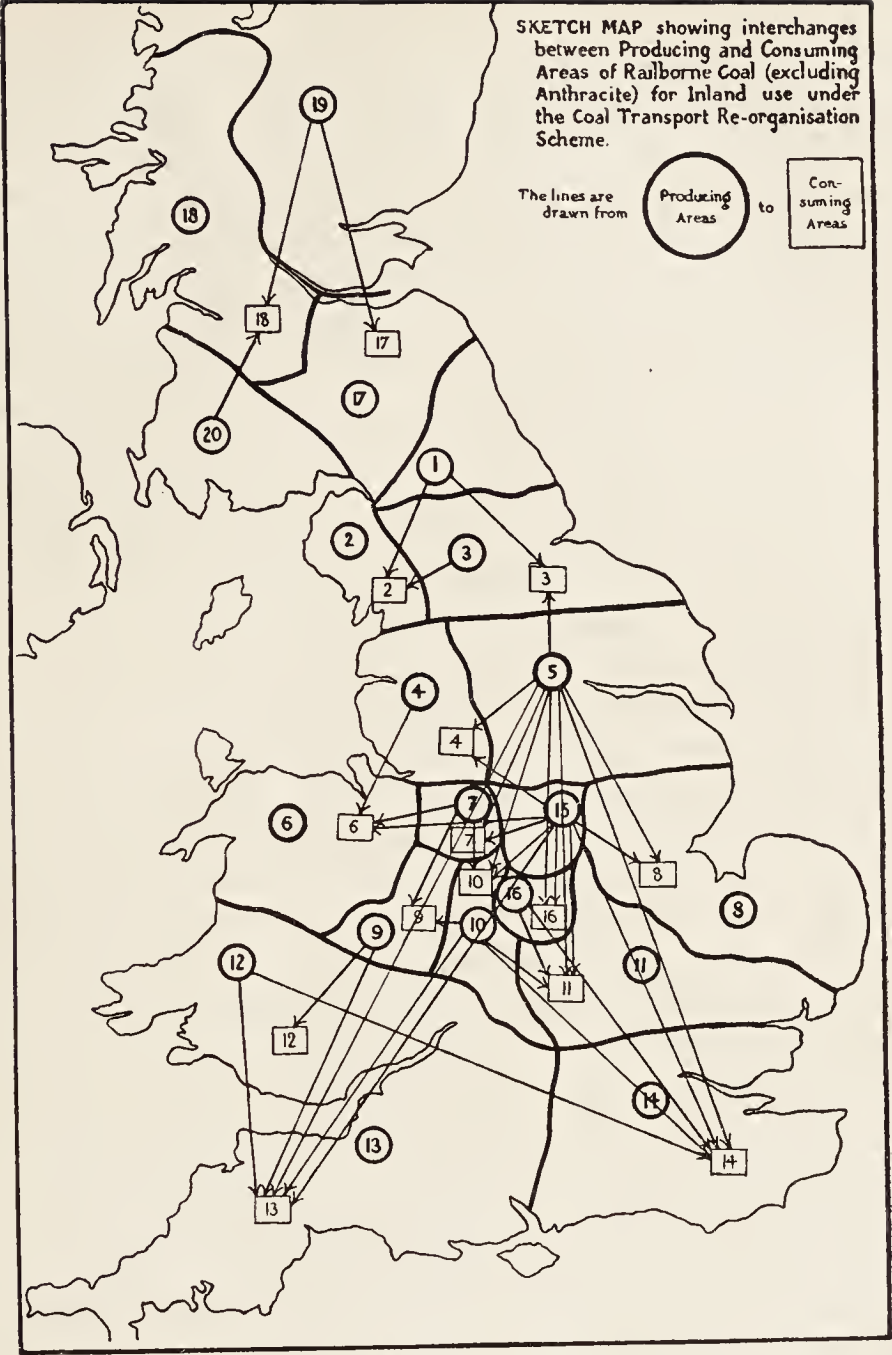
In the development of the scheme certain elementary facts were kept constantly in view, and it was built up in accordance therewith. Thus (1) it was a fact that coal in many instances was being conveyed long distances by rail which might be consumed nearer the point of production, that the requirement at the point of destination of such long-distance-borne coal could be met—in many cases—by coal produced nearer to hand. (2) In view of the superior facilities afforded by the main trunk lines, the movement of traffic was more expeditious and simpler if it followed those routes. (3) That it was desirable that, as far as possible, the movement of coal should be along well-defined directions, i. e. north to south, north to south-east, north to south-west, east to west. The scheme had then for its object the consumption of coal as near the producing point as possible, and the reduction to the minimum of long-distance and cross-country transport. For this purpose Great Britain—Ireland was not included in the scheme—was divided into twenty areas (see Fig. 2), all but two of which, viz. Nos. 8 and 11, situated in the eastern counties of England, are coal-producing areas. Each colliery was required to make a return to the Controller, on a specified form, showing all coal produced under the following headings :

- (a) Steam and Manufacturing,
- (b) Gas and Coking,
- (c) Household,

and the destinations of such coal. A synopsis of the information so obtained was necessary in order that a complete picture might be provided showing in respect of each separate area :

- (a) The weight of each class of coal produced,
- (b) The weight of each class of coal consumed,

and the result was that the long-suspected fact was revealed that in some cases areas which did not produce sufficient coal for their own consumption were actually sending out large quantities to



NO. OF AREAS AFFECTED
 Exporting.....39 } 75 or decrease of 75.77p.c.
 Importing.....39 } on December 1916.

- | | | |
|------------------|---------------------------|------------------------------|
| 1 Northumberland | 8 Eastern Counties | 14 South Eastern Co.s London |
| 2 Cumberland | 9 Salop | 15 Derby and Notts |
| 3 Durham | 10 Birmingham District | 16 Leicestershire |
| 4 Lancashire | 11 North Hants to Essex | 17 South-East Area(Scotland) |
| 5 Yorkshire | 12 South Wales & Mon | 18 North-West Area(Scotland) |
| 6 North Wales | 13 South Western Counties | 19 North-East Area(Scotland) |
| 7 North Staffs | | 20 South-West Area(Scotland) |

FIGURE 2.

other areas, and had, so to speak, to import coal from other areas to meet their own consumption requirements. North Wales, for instance, may be taken as a case in point. At this time its total production of rail-borne coal was about 150,000 tons per month, its consumption per month being about 220,000 tons; yet, although its consumption exceeded its production by about 70,000 tons, there was nevertheless being sent out of the area no less than 40,000 tons a month, a fact necessitating the monthly importation to the area of about 110,000 tons instead of 70,000 tons, which under a perfect system of allocation would have sufficed to balance local production and consumption. Further, the 110,000 tons of 'imported' coal were being derived from ten different areas. Under the coal transport scheme the areas that could send coal to North Wales were limited to three.

It will be seen from this example, one of many cases, that great simplification was obtained in regard to the volume and flow of coal from the railway working point of view. The Coal Control had in view, as a second step, the regulation of the flow of coal within each area, as it was realized that the possible economies in this respect might be even greater than between area and area; but this was a much more onerous and complicated matter and one requiring the expenditure of a vast amount of work and a long time to effect, and the staff of the Coal Control Department available for the purpose of working out a satisfactory scheme was too limited to allow of its being proceeded with, being already fully occupied in dealing with the coal-supply problems which were, and continued to be, acute, so that the within-area transport arrangements still await investigation.

Turning to the sketch-map descriptive of interchanges between producing and consuming areas (see Fig. 2), the fact that an area was coal-producing, it will be seen, is indicated by a circle, that it was a coal-consuming area is shown by a rectangle. In those cases where rectangles are omitted, the omission indicates that those areas produced sufficient coal to meet their own requirements in point of consumption, and, consequently, had no need to take supplies from outside. The producing areas from which, under the scheme, consuming areas could each derive a portion of their supply are shown by lines radiating from the former.

For the administration of the scheme the Controller utilized the District Coal and Coke Supply Committees (see p. 36), and empowered them to conduct the necessary arrangements for putting it into force. He strengthened these Committees by adding to them members, not coal-owners, representative of the consumers' interests. The Committees became the connecting links between the collieries, on the one hand, and the factors, merchants, and direct consumers on the other. They instructed the colliery owners in their area as to tonnage to be diverted from the area, specified the factors, merchants, and direct consumers requiring supplies, and stated the description and quantities of coal required to be diverted after the 8th of September. The successful working of the scheme which resulted was in great measure due to the hard work, tact, and skill of these Committees.

To illustrate the application of this Order the case of South Wales may be taken (see Fig. 3). At the time of the issue of the Order, the Secretary of the Coal and Coke Supplies Committee for South Wales and Monmouthshire, and of the South Wales Coal-owners' Association, issued a memorandum explaining the restrictions as applicable to his area. It should be remarked, in respect of the South Wales coal-field (extending over an area of nearly 1,000 square miles and occupying the greater part of Glamorganshire, Monmouthshire and part of Carmarthenshire, Pembrokeshire, and Breconshire), that three main classes of coal are produced: Anthracite, in the western part of the field (Carmarthenshire and Pembrokeshire); the famous steam coal, usually derived from the deeper seams of Glamorganshire and Monmouthshire; and the more bituminous coal, obtained from some of the upper seams in the steam-coal region. The chief output from this field is steam coal; coal of gas and coke making quality (from the more bituminous coal) is produced in quantity little more than sufficient to meet local requirements. No field in Great Britain is productive of coal of such widely differing quality, and it constitutes one of the most important and richest coal areas of the kingdom.

The Secretary of the South Wales District Coal and Coke Supply Committee (Mr. Finlay Gibson) pointed out in the memorandum mentioned above that after the 8th of September (the

Order took effect on the 10th of September) coal produced at the collieries in Monmouthshire and South Wales would be allowed to be sent by public railway for inland consumption only to areas named below. The requirements of all consumers in Monmouthshire and South Wales would, in the first instance, have to be satisfied, and that even then only certain descriptions of coal might be sold for consumption in the specified outside areas. Steam and manufacturing coal might be sent to Area No. 13 (South-western Counties) and to Area No. 14 (South-eastern Counties). Gas and coking coals could not be supplied to any area except Monmouthshire and South Wales. House coal might be supplied to Area No. 13 (South-western Counties). All other areas were prohibited areas, and no coal of any description could be sent from South Wales and Monmouthshire to them except under a certificate from the Controller of Coal-mines. Areas Nos. 13 and 14 (South-western and South-eastern Counties) were restricted areas for the classes of coal from South Wales and Monmouthshire previously referred to. The local Coal and Coke Supplies Committee had the right to reduce the quantities of such classes of coal sent to consumers in these areas if they considered it necessary to do so. No coal from other coal-fields could be imported into Monmouthshire and South Wales other than steam and manufacturing coals and house coal from Shropshire, and then only under local restrictions. Contracts for the sale of coal to consumers in the prohibited areas were abrogated as from 6 p.m. on the 8th of September. The Committee would communicate immediately with the Colliery Companies, and, if necessary, with factors, merchants, and direct consumers, with a view to obtaining from them such information as might be necessary to enable them to arrange for supplies from Monmouthshire and South Wales collieries in substitution for coals hitherto brought into South Wales and Monmouthshire from those areas from which importation was prohibited. Factors, merchants, or direct consumers would be informed prior to the 8th of September to whom they should apply for supplies in substitution for those previously obtained from other districts. In the meantime, factors, merchants, or direct consumers were requested not to communicate with the Committee, but to await instructions as to where they might obtain their supplies. The

map accompanying and illustrating Mr. Finlay Gibson's memorandum is given in Fig. 3.

The Order did not affect water-borne coal (whether for export or for shipment coastwise or for bunkers) nor anthracite, so that, for instance, Durham gas coal, a large part of which is dealt with by sea-borne traffic (ordinarily amounting to about 8 million tons) was unaffected by the scheme, and the London gas companies continued to derive their supplies by coastwise shipment so far as the submarine campaign and consequent interference with North Sea shipping permitted; but some other districts would have to go elsewhere, a fact which gave rise to much criticism of and some hostility to the scheme. Certain other consumers of even considerable importance and experience alleged that classes of coal which they would have to take under the Transport Scheme would be quite unsuitable for their work. Technical experts were, therefore, engaged to consider such cases, with the result that a great many of the objections proved to be untenable. Inconvenience undoubtedly was occasioned by manufacturers, merchants, and others having to switch on to sources of supply other than those they had been used to, but the inconvenience was greatly magnified, and the answer to all such complaints of inconvenience was that we were engaged in a life and death struggle with Germany, and inconvenience is a small strain to put upon one's patriotism. A few exceptions had to be made, often in connexion with the coal required for gas producers, special licences being issued to meet such cases. Generally, it may be said that the scheme worked excellently, and, broadly speaking, there was little difficulty in making reasonable arrangements within the terms permitted by the scheme.

In an admirable review of the scheme a leading organ of the coal trade ¹ concludes the article with these words: 'Mr. Calthrop has inaugurated a bold experiment in the reorganization of so complex a business as that of coal distribution. It should be everywhere accepted in a helpful spirit as a war measure. Criticism can always be directed against any revolution in established practice. This scheme, however, has been so carefully thought

¹ *Colliery Guardian*, the 13th July 1917, leading article entitled 'Inland Distribution of Coal'.

MAP showing the Prohibited and Restricted Areas as regards the distribution, by Public Railway for Inland Consumption, of Coals produced from Collieries in Monmouthshire and South Wales.



- 14 {Prohibited Area.) for Gas and Coking Coals, and House Coal.}
 {Restricted Area) for Steam & Manufacturing Coals.}
- 13 {Prohibited Area) for Gas and Coking Coals.
 {Restricted Area) for Steam & Manufacturing Coals & House Coal.}
- 12 {Monmouthshire and South Wales Area [Restricted Area for
 Steam & Manufacturing Coals, & House Coal, from Shropshire]}

FIGURE 3.

out in all its complexity that we have every confidence in its success.’¹

Private Owners' Wagons

No scheme of land transport at this time would have been complete without it dealt with the subject of privately-owned wagons. So the Controller of Coal-mines issued, via the Board of Trade, under Regulation 7 B of the Defence of the Realm Regulations, an Order ‘for the purpose of making more efficient use of railway plant with a view to the more successful prosecution of the War’. The provisions were as follows :

1. Where it appears to them necessary to increase the supply of wagons to any colliery, the Board of Trade may take possession of any private owner's wagons and use them for the purpose of maintaining an adequate supply of wagons at the colliery in question.

2. Where possession is so taken of a wagon, there shall be paid to the owner for the use of the wagon such amount as may be agreed or as may be determined, in default of agreement, by the Railway and Canal Commission or by an arbitrator appointed by that Commission.

3. The Controller of Coal-mines may issue instructions in writing from time to time directing the private owner of a wagon or wagons to place the same at his disposal, and the Controller may take possession thereof on behalf of the Board of Trade.

4. The owner of any wagon and any other person affected by directions given under this Order shall comply with any directions so given and give all reasonable facilities for carrying out these directions.

5. Any persons acting in contravention of, or failing to comply with any of the provisions of, this Order is guilty of a summary offence against the Defence of the Realm Regulations.

6. This Order shall apply to Great Britain, and may be cited as the Private Owners' Wagons (No. 2) Order, 1917.

This Order, though it marked a step forward, not only did not go far enough, but was seldom acted upon. It would have been simpler, more effective, and in the end less irritating, to have made general pooling arrangements applicable to all wagons rather than to have approached the subject piecemeal.

¹ The reader who wishes further to investigate this branch of the activities of the Controller of Coal-mines is referred to the valuable evidence of Mr. E. H. Davies before the Coal Industry Commission, pp. 79-89, Minutes of Evidence, vol. i. Mr. Davies succeeded Mr. Hunt in charge of the Supplies Section of the Coal Control.

The Distribution of Household Coal during the years 1917-18

The Controller, having dealt with the distribution of coal as between areas with a view to economy of transport, had next to consider the important and pressing question of the equitable distribution of coal for industrial and domestic purposes with a view to economizing consumption.

On the 23rd March 1917 a Member of Parliament, Mr. J. H. Henderson, moved a resolution in the House of Commons which read : ‘ That in the opinion of this House, the Government should issue regulations under the Defence of the Realm Act directing the local authorities throughout the country to establish depôts for the sale and delivery of coal, sugar, and other necessities,’ and he said that during the winter, one of the severest for many years, the poor had suffered much hardship for want of a regular supply of coal. There was no real scarcity of coal, he said, and local authorities, if depôts were established, would be in a position to deliver it regularly to the people.

In July of this year (1917) was constituted the Household Fuel and Lighting Branch of the Coal Control previously alluded to on p. 94, and placed under the charge of Mr. Frank Pick, the Commercial Manager of the Underground Railways of London and of the London General Omnibus Company, Ltd. The management and direction of this branch bristled with difficulties, and in order to secure its smooth and effective working, qualities of tact, initiative, and administrative ability were requisite in the person at its head ; of these attributes, Mr. Pick was pre-eminently possessed, and to this fact the general success which attended the rationing of domestic coal was largely due.

Rationing of Domestic Coal

The section had been constituted in order to administer, in respect of the Metropolitan area, the Household Coal Distribution Order, made on the 10th of August under the Defence of the Realm Regulations. The Order, which was accompanied by an explanatory memorandum, embodied three principal objects, viz. (1) the establishment of minimum stocks of coal to be held in reserve and maintained throughout the winter ; (2) a distinct

preference or priority in the distribution of any available stocks of coal, in case of shortage, to be conferred on consumers requiring or taking supplies in quantities not exceeding 2 cwt. per week ; (3) restriction in the consumption of coal where it was in excess of the normal average requirements of houses of different sizes.

The explanatory memorandum accompanying the Order, which, as with the Order, is too lengthy a document to quote in full, stated that

‘ Every effort must be made by local authorities to encourage economical methods of consuming the coal allowed, so as to ensure the maximum benefit. . . . Organized public opinion must check extravagant consumption. The real effectiveness of any Order rests upon the goodwill and assistance of the people. . . .

‘ There is an urgent need for the exercise of economy in the consumption of coal. The demand for coal for industrial purposes was never greater, owing to the vast increase of munition works. The railways are over-burdened with traffic, while the facilities for moving traffic are reduced. Every possible relief must be afforded them compatible with meeting the public needs. For this reason the consumption of coal to secure additional comfort beyond what is fairly necessary, or to warm more rooms than are really required in use, must be stopped.’

The allowance of coal for dwelling-houses, flats, and tenements, as set out in the Order, was as follows :

FROM THE 1ST OF OCTOBER TO THE 31ST OF MARCH

No. of rooms	t. cwt. gr.	t. cwt. gr.
1, 2, 3, or 4	0 2 0 per week	2 12 0 per six months.
5 or 6	0 3 0 „	3 18 0 „ „
7. . . .	1 0 0 per calendar month	6 0 0 „ „
8. . . .	1 3 0 „ „ „	6 18 0 „ „
9 or 10	1 7 0 „ „ „	8 2 0 „ „
11 or 12	1 10 0 „ „ „	9 0 0 „ „
13, 14, or 15	2 0 0 „ „ „	12 0 0 „ „
Over 15	2 10 0 „ „ „	15 0 0 „ „

FROM THE 1ST OF APRIL TO THE 30TH OF SEPTEMBER FOR WHOLE YEAR

No. of rooms	t. cwt. gr.	t. cwt. gr.	t. cwt. gr.
1, 2, 3, or 4 . 0 1 0	per week	1 6 0 per six months	3 18 0 per annum.
5 or 6 . . 0 1 2	„	1 19 0 „ „	5 17 0 „
7 . . . 0 10 0	per calendar month	3 0 0 „ „	9 0 0 „
8 . . . 0 11 2	„ „	3 9 0 „ „	10 7 0 „
9 or 10 . . 0 13 2	„ „	4 1 0 „ „	12 3 0 „
11 or 12 . . 0 15 0	„ „	4 10 0 „ „	13 10 0 „
13, 14, or 15 . 1 0 0	„ „	6 0 0 „ „	18 0 0 „
Over 15 . . 1 5 0	„ „	7 10 0 „ „	22 10 0 „

Room was defined—additional allowances were permitted in case of hardship ; e. g. the presence of aged or infirm persons, invalids, or young children, of illness, occupation of separate rooms by lodgers, the conduct of business in a dwelling-house, and absence of provision of gas and electricity or other means of heating and cooking.

The Order was applicable to the London area only, that is to say, the Metropolitan Police District, which includes a good deal more than the city and county of London.

At this time the distribution of household coal throughout Great Britain, exclusive of the Metropolitan area, was governed by two Committees, viz. one having jurisdiction over the South-eastern and South-western Counties, with about 150 local Distribution Committees ; the other, the Northern Counties Advisory Committee, covering the rest of Great Britain with about 24 local Distribution Committees. In respect of these two areas no special Order was made during the year under review, moral suasion being the only agent applied to secure the objects in view. It was not until July of the following year that the whole of England and Wales was dealt with compulsorily, the Order alluded to above being withdrawn and a new Order based upon it, but considerably modified and extended, and known as the Household Fuel and Lighting Order, 1918, being made applicable to the whole of England and Wales, and in September of the same year a corresponding Order was made applicable to Scotland, coming into force in October.

The quantity of coal consumed for domestic purposes in normal times in the United Kingdom has never been accurately ascertained. It has variously been estimated at 35, 40, and 42 million tons per annum, but probably 47 million tons is nearer the mark. The Control was faced with the difficulty that there was not sufficient coal to go round at the pre-war rate of consumption. They had, therefore, to endeavour to effect two objects : (1) to reduce the demand for household coal within more manageable limits ; (2) to ensure some supply of coal to every one on terms as nearly as possible corresponding to their needs. The expected shortage of coal was about 25 per cent. from the normal, but at times the actual shortage exceeded this figure by several

per cent., and Mr. Pick's experience is to the effect that for some time the average was 33 per cent. below normal. The quantity with which the Coal Control actually dealt was about 32 to 33 million tons.

It is more convenient, in respect of this subject, to depart from the practice so far followed in this work of limiting the consideration of events to the year of their occurrence, and to explain and discuss now the policy and the administration pursued by the Controller in respect of the distribution of household coal throughout the years 1917 and 1918, rather than to divide the matter, the process being one of logical evolution and not a series of actions to meet changing conditions, which so much of the war legislation necessarily was.

Organization

The organization necessary to carry out this work, as will be realized, was very considerable. For the purpose of administration the whole of England, Scotland, and Wales was divided into areas, mainly by counties, following as closely as possible the divisions already agreed to by the Controller in respect of the Coal and Coke Supplies Committees.

Within each division were a number of local authorities, and the local authority's district was made the basis of the rationing scheme.

Each division was in charge of a Divisional Officer. These officers were selected mainly from railway servants as being peculiarly fitted by training for the conduct of this special class of work, and associated with them were nominees of the coal trade for the division. These officers practically devoted the whole of their time to the direction of the technical matters concerned with the orders emanating from Mr. Pick's office.

Representatives of the gas and electricity authorities within the division were also added in an advisory capacity to the staff of the division.

In the local authorities' districts, on the advice of the Coal Controller, the local Surveyor or Engineer was usually appointed to the post of Local Fuel Overseer. At the time of making the Household Fuel and Lighting Orders, no additional war duties

had been thrown upon these officers. The Controller was therefore able to secure ready made in all districts reliable and capable administrative officers, a factor of great importance and one making for the success of the scheme.

It being the wish of the Controller that as little disturbance as possible should be made in the trade, the coal merchants in each district were invited to nominate a representative to assist the Local Fuel Overseer in all trade matters ; the trader, therefore, was brought in as a servant of the Control.

Another advantageous arrangement was the payment by the Controller of grants to the Local Fuel Overseers direct. This, in effect, made the Local Fuel Overseer a servant of the Controller and not of the local authority. He became responsible to the Controller for the direct administration of the Orders, the local authority only exercising control over the Local Fuel Overseer in so far as that officer had discretionary power.

It was, of course, most desirable that the Local Fuel Overseer should carry out the instructions of the Controller when they were specific ; but where that officer had to decide such matters as allowances of coal, emergency arrangements, or disputes between traders and consumers, it was equally desirable that there should be set up a public body constituted of public representatives. Consequently the Orders provided for a Committee to be appointed by the local authorities to act as a Court of Appeal in all disputes in which the Fuel Overseers were concerned or in which they had a discretion.

Allowances

The allowances originally arranged for the Household Fuel and Lighting Order, 1917, applicable to the Metropolitan Police District, were based upon the results of three investigations as to the amount of coal consumed : one conducted by selected coal merchants, one by questionnaires sent out from the Coal Control Department, and one carried out through the co-operation of the staff of a large public undertaking.

No attempt was made in connexion with the first Order to cut down the necessary supplies, as the problem before the Coal Control was one of distribution rather than of restriction.

When, however, the Household Fuel and Lighting Order (1918) was made applicable to the whole country the problem became one of economies in coal consumption as well as of distribution, and the scale of allowances were reduced ; but again the reduction took place not at the bottom of the scale but in the middle and upper reaches.

Curiously enough, the provision of an allowance for poorer consumers of 2 cwt. per week resulted in an increase in the quantity of coal consumed by the working classes. There is no doubt that, before the War, the working classes could not in many instances afford a reasonable allowance of coal, and could not obtain it even if they could afford it, but with the inauguration of control and the general rise in the level of the wages of work-people, the working classes were able to demand the coal which the Controller attributed to them. The total demand for coal was not therefore reduced so much as might have been expected with the introduction of the rationing scheme.

Emergency Coal

Another factor which contributed to the success of the rationing of coal was the ability of the Controller to supply emergency quantities of coal direct to any area in which the supplies ran short.

The Controller earmarked and held at his own disposal a substantial tonnage of coal which was dealt with by orders from the Coal Controller's Department direct to the collieries to supply to the Local Fuel Overseers for distribution through trade channels where the ordinary source of supply in any district had become dried up or dislocated.

The Household Fuel and Lighting Orders had a scope wider than household coal proper, and for all practical purposes governed the retail coal trade. The impossibility of taking over household coal without dealing with all coal handled by the retail coal trade was soon realized ; consequently the Fuel and Lighting Order of 1918 embraced all coal and coke sold in small quantities, that is, the retail coal trade. The subject-matter of the Order may be considered as included in three parts, two minor parts and one principal part, viz. :

- (a) The control of the retail trade.
- (b) The conditions under which coal was to be sold.
- (c) The maximum retail prices of coal.

(a) The Control of the Trade

The persons engaged in the retail trade were required either to register as merchants or to take out licences as dealers, so that the department might have a complete record of the persons engaged in the business of selling coal retail, to meet which machinery of registration was set up (see Clauses 40, 41, and 42 of the English Order—the Scottish Order was somewhat different, but the subject-matter identical).

Owing to the fact that there was a limited quantity of coal available for distribution throughout the country when the registration of the retail trade had been completed, it was made a closed trade, as it would not have been fair to allow any new-comer to enter the trade at the moment. To do otherwise would have necessitated a reorganization of supplies in order to provide the new-comer with coal to carry on. Customers had to register with a coal-dealer in order to be supplied ; new customers had to go to their previous dealer.

In the domestic coal trade there were, and are now, at most four and usually three stages in delivery. The four are : (1) the colliery owner, or producer of the coal, who forwards it either direct to a merchant or through (2) a factor to (3) a merchant, who may pass it on to (4) a dealer. It was necessary in the organization scheme to draw a line between a merchant and dealer, and to get control over the merchant, the dealers being merely subsidiary distributing agents. The factor is an individual who comes in between the colliery owner and the merchant ; he also, on occasion, deals in coal direct by truck to consumers. The number of those who deal direct by truck with consumers was found to be about 1,200 in England and Wales and 200 to 300 in Scotland. Factors who did not deal direct with the consumer were not registered, but probably nearly all, if not all, factors do occasionally deal to some extent direct with consumers.

The greater number of hands through which coal passes before it reaches the consumer the higher the cost to the latter. Com-

paring the cost of a ton of coal at the colliery with the retail price the consumer of domestic coal has often wondered why he has to pay so high a price for the coal delivered into his cellar. Thus, although the cost at the pit of Best Derby in August 1914 was only 11s. 6d. per ton, yet it was sold to the London consumer at 25s. 6d. In August 1918 the cost at the pit was 23s. 3d., the controlled selling price in London being 43s. 6d.¹ Of course coal does not in all cases go through so many hands before reaching the consumer; consumers who have sufficient stocking room in their cellars frequently purchase by truck load direct from the colliery owner; others from the merchant direct, and in colliery districts the merchant usually buys direct from the colliery and retails the coal direct to the consumer. The functions of the factor as a channel of delivery are to supply capital, credit, and goodwill or trade connexion. He is usually the owner of many railway wagons, and, as such, is able to convey coal to merchants and dealers who trade in a small way, the wagons so constituting on their behalf movable stores of coal. The bulk of the trade is actually done in private wagons as compared with railway wagons—there are numbers of railway-owned wagons which are not permitted by the railway companies to be filled with coal. The second function which a factor performs is the provision of credit facilities, as Mr. Pick expressed it in his evidence before the Coal Industry Commission: ‘The Colliery Companies, as I see it, will not afford credit to the smaller merchants and dealers. They are people who have no banking accounts and who live probably with a wagon book in their pocket and just their physical plant. The factor comes in and provides credit at the colliery, by means of which coal is sent to the merchants and dealers. He performs almost banking functions for the smaller traders.’² The third function which a factor performs is the maintenance of a trading connexion or goodwill with the collieries and the traders—that is to say, he brings the two together. Besides these functions he does, to some extent, perform a selective function in that he does a certain amount of work in connexion with the selection and grading of coals and applying them to their proper uses.

¹ The details of the cost, charges, and profits in respect of this example are given in Appendix No. 46, p. 73 of Appendices vol. i-iii of the Coal Industry Commission.

² Mr. Pick’s evidence before the Coal Industry Commission.

The remuneration of the factor under the Order was 1s. per ton upon household coal. Outside the coal-field area, where coal is usually sold direct, half the coal in towns and four-fifths of the coal in the country districts is sold through factors. The farther away from the towns the less organized is the trade in coal; the merchants and dealers are much smaller people, and consequently resort to factors much more frequently.

As to the registration of consumers with suppliers as involved in the Orders, consumers had to register for their supplies of coal; they were entirely free to register with whom they chose. On the other hand, the whole basis of coal distribution as ordered by the Controller 'was on the one principle that where coal went in previous years, so it should go in subsequent years. Without undertaking the entire re-allocation of coal as between collieries, factors, merchants, and dealers, it was necessary we should, in order to get on with the work, say that where coal had flowed before so it should flow again; otherwise it would have meant a large clerical staff and no doubt a great deal of friction while the readjustment of coal supplies was undertaken.'¹ Mr. Pick therefore issued a direction (it was not in the Order) to the Local Fuel Overseers, appointed by the local authorities to carry out the Order, that so far as possible customers should be required to register with their previous supplier.

By Clause 9 of the Order advertisement and touting were forbidden, the effect of this decision being at once to curtail certain expense which merchants and dealers might otherwise have incurred in connexion with the coal trade.

The functions of coal merchants and dealers are well known; they relieve the colliery owner of the need of finding a market at home for his coal; they buy the coal from him and pass it on to the retailer, or in the case of industrial coal to a large extent to the consumer direct. The retail merchant provides cartage facilities.

(b) *The Conditions under which Coal was sold*

Apart from the machinery which was established for the checking of supplies to consumers, which involved additional

¹ Mr. Pick's evidence before the Coal Industry Commission.

clerical work to the trade, special conditions governing the sale of coal were expressly set out in the Orders, namely :

1. The establishment and maintenance of reserve stocks by merchants. Coal is chiefly stocked in London in the summer and 'picked up' in the winter. Thus in March 1918 there still remained roughly 300,000 tons of coal in stock in London. These stocks represented a fair capital outlay by the merchants concerned, and, further, coal is a wasting asset and loss occurs due to weathering and handling.

2. The enforcement of restriction on deliveries. An indirect effect of rationing was that it was not found possible to send out the coal in full cart-loads. Restrictions were instituted whereby the consumer could not obtain more than 5 cwt., 10 cwt., or 1 ton at a time, whereas a London cart, when full, carries 2 tons. The effect of this restriction was to increase the cost of delivery.

3. Co-ordination of deliveries. Owing to the reduction in the man power employed in the business, e.g. coal porters and cartmen, it was necessary to co-ordinate deliveries and reduce overlapping in this respect to the minimum and to require transfer of orders so that the deliveries might be carried out as economically as possible. Powers in this connexion were therefore vested in the representatives of the local authorities throughout the country undertaking the work.

4. Casual trade or hawking *versus* regular coal trade. Prior to the War there were a great many more hawkers' carts upon the streets than there were during the War, and the only way in which the Coal Control was able to secure all the small consumers being adequately served was by controlling to some extent this casual trade and regularizing it.

5. The question of small quantities. One of the principal objects of the Household Fuel and Lighting Order was to secure distribution of coal in small quantities to small consumers, and preference had to be given to those deliveries over the large deliveries. Consequently deliveries in small quantities were made compulsory upon the trade in order to secure the end in view. The result was, of course, the multiplication of small as against large deliveries under the Control, and this again was a fact making for increased cost of distribution. It was in the highest

degree desirable that the pressing needs of the poor should be met, and probably at no time has the very small consumer of household coal been better served with coal than he was during the period of control. The effect of the rationing of coal to consumers involved, therefore, the enlarging of the trade in small quantities at the expense of the trade in large quantities, with a corresponding increase in the cost of delivery.

Cost was affected, too, by reduction in the quantity of coal at the disposal of the Coal Control; all fixed charges increasing with a reduction in quantity.

(2) PRICES AND PRICE CONTROL

Directions as to the Sale of Coal.—Wholesale Coal Prices Order, 1917

With the object of maintaining colliery prices of coal as far as possible at a fixed level, the Controller of Coal-mines in June 1917 issued directions that no coal should be sold by collieries for consumption in the United Kingdom except at the maximum prices under the Price of Coal (Limitation) Act. There was given a list of the specified prices which were to be charged in all sales of coal after the 28th June 1917 for shipment to France and Italy (including coal for the manufacture in the United Kingdom of coke-oven coke and of patent fuel for shipment to those countries). The prices in question were f.o.b. at the nearest shipping ports to the collieries, and for cash within seven days after shipment. If shipped to a more distant port the extra railway and shipping dues might be charged. No discount, rebate, or allowance of *any kind* was to be given to any buyer, and the quantities to be paid for were to be the quantities certified by the colliery, railway, or harbour authority as customary.

The object and the effect of these directions were to stabilize the prices by prevention of fluctuations to preserve regularity in the distribution and export of coal in the different producing centres. Practically one market price for a given class of coal was maintained and speculation in coal cargoes eliminated. It was possible to fix the prices at the maxima by reason of the fact of the absence

of foreign competition, for competition from America had not yet become manifest, all export trade being dominated by the tonnage problem. It was necessary to fix the prices at the maxima in order to meet the greatly increased cost of production.

The application of the Coal Transport Order rendered necessary the regulation of the charges made by coal factors and merchants, so, on the 5th of September, the Coal Controller issued an Order known as the Wholesale and Retail Coal Prices Order for the Home Trade. As we know, prices chargeable by the owner of the coal at the pit mouth were already controlled, and factors' and merchants' charges had for the past two years been the subject of voluntary arrangements between the merchants and the Board of Trade or local authorities (see p. 35), and on the whole this method of procedure had worked fairly satisfactorily in maintaining prices at a reasonable level. In some cases, however, complaints had been received pointing to excessive charges. The Controller took advantage of the opportunity afforded him by the introduction of the Coal Transport Reorganization Scheme to cancel all contracts for coal for inland consumption on that date and to review generally the retail prices being charged by merchants and colliery companies retailing their own coal.

Allowing the factors and merchants a factoring or retailing profit, the new prices were based on a margin above cost, as on the following scale :

- On locomotive coal at 3*d.* per ton.
- On railway coal at 6*d.* per ton.
- On supplies for national factories at 6*d.* per ton.
- On supplies for gas and electricity undertakings at 9*d.* per ton.
- On supplies to retailers at 1*s.* per ton.

But on other coal supplied in quantities amounting to over 500 tons annually the margin was advanced from 1*s.* to 1*s.* 3*d.*, and on sales direct to a consumer in truck loads totalling less than 500 tons annually it was 2*s.* The overall average was about 10*d.* a ton compared with 1*s.* 6*d.* a ton, for which the merchants and factors asked when negotiating with the Controller. This scale of prices was the outcome of an inspection of the books of a number of coal merchants by officials of the Coal Control Department.

(c) The Prices

In view of the wide differences in the cost of coal in different localities, due in large measure to difference in respect of cost of transport, but partly also to differences in the maximum colliery prices under the Price of Coal (Limitation) Act and in the merchants' costs of distribution, the duty of fixing the maximum retail prices in the localities was assigned to the local authorities; the basis upon which the prices were to be arranged being that the net profit from sales of coal delivered by road vehicle from depôt, wharf, or railway siding in lots of one ton should not exceed 1s. per ton. The Order prescribed, further, how prices for sales of lots smaller than one ton were to be fixed by reference to the maximum prices of lots of one ton or over. Under the Retail Coal Prices Order there was no co-ordination of prices district by district, and there was no appeal to a revising tribunal. Under the Household Fuel and Lighting Orders the Controller had a right to review or approve, and an aggrieved party could appeal to the Controller to amend any price.

Instructions were issued to the Colliery Companies, informing

' Best Derby ' Coal August 1914				' Best Derby ' Coal August 1918			
Average Selling Price 25s. 6d. per ton				Controlled Public Price 43s. 6d. per ton Delivered into Cellar			
	<i>Per ton</i>				<i>Per ton</i>		
	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>	<i>d.</i>	<i>s.</i>
Cost at pit . . .	11	6			23	3	
Railway rate . . .	6	4					
Wagon hire . . .	1	0					
			18	10			
Wages — loaders — big sacks		9					31
Half sacks — picking out slates, tarring sacks, screening and foremen's fee, land- ing coal to heaps . .		2½					1
			11½				
Carmen, delivery in big sacks		8					
Driving money and at- tendance at stables . .		2½					
			10½				
Carried forward			20	8			1
							9
							32
							10

'Best Derby' Coal August 1914			
Average Selling Price 25s. 6d. per ton			
	Per ton		Per ton
	s.	d.	s. d.
Brought forward			20 8
Railway siding rent, demurrage, weighbridge charges, weights and scales, tools, &c.			1
Sacks			1½
Vans, trolleys and weighing machines	1	¾	
Horse depreciation	1		
Forage and bedding	5	½	
Shoeing and veterinary attendance, harness and stable expenses	2	½	
Stable rent, local taxes, heating and lighting lamps, &c.	1	½	
			1 0¼
Loss on small weights			4
Salaries	1	3	
Establishment charges	1	1½	
			2 4½
Total Cost	24	7¼	
Less pit cost, railway rate and wagon hire	18	10	
Cost	5	9¼	

	s.	d.	s.	d.
Average selling price	25	6		
Cost	24	7¼		
Margin of profit			10	¾

There is an additional charge upon all supplies obtained through factors.

'Best Derby' Coal August 1918			
Controlled Public Price 43s. 6d. per ton			
Delivered into Cellar			
	Per ton		Per ton
	s.	d.	s. d.
Brought forward			32 10
Carmen, delivery in big sacks	1	0	
War bonus		6	
Driving money		3½	
Sunday attendance at stables		½	
			1 10
Railway siding rent, demurrage, weighbridge charges, weights, scales, tools			1
Sacks			5
Vans, trolleys and weighing machines	4		
Horse depreciation	4		
Forage and bedding	1	6	
Shoeing, veterinary attendance, harness and stable expenses	3	½	
Stable rent, local taxes, heating and lighting lamps	1	½	
			2 7
Loss on small weights and orders			7
Establishment expenses			3 3
Debenture and capital charges			3
			41 10
Less cost rate, coal and wagon	31	1	
Net cost	10	9	

(1) Controlled selling price	43	6
Cost, rate, coal, and wagon	31	1
Margin	12	5
(2) Controlled selling price	43	6
Cost per ton delivered	41	10
Difference	1	8

There is an additional charge upon all supplies obtained through factors.

them that they were to receive the prices fixed under the Price of Coal (Limitation) Act, but that was not to be taken to mean that the highest price obtained during the year ended the 30th June 1914 was to be the standard, and as to contracts, none made before July 1913 was admissible as a basis, and no colliery might refuse to renew a contract, or alter the conditions of supply in order to obtain a higher price ; further, where coal was delivered from one district to another, the price charged to the new customer had to be calculated on the level prevalent in the latter locality.

Allusion has been made on page 117 to the great disparity which exists between the price of coal at the pit mouth and that which the householder has to pay. Let us consider the reason for this. What are the items of cost which accumulate in the passage of the coal from the pit to the coal-cellar ?

The starting-point for retail coal is the actual cost of the coal in railway wagon or barge at the point at which distribution commences ; that is, the pit-mouth price, which was stereotyped by reason of being governed by the Price of Coal (Limitation) Act, plus the railway transport charges. Then if the coal is handled by a factor there are his charges, viz. wagon hire and profit. These are to be added to the cost of loading into sacks and cartage, as well as the profits of the merchant and dealer. The Coal Industry Commission in the year 1919 was at great pains to arrive at an understanding of the aggregations of charges, and obtained a clear statement of these from the Chairman of the London Coal Merchants' Society in respect of 1 ton of Best Derby coal sold in the Metropolitan area. Comparing the month of August 1914 with that of 1918, the items were as shown on pp. 122-3.

The highest distributing charge incurred by the Co-operative Wholesale Society in the London area was in the hilly districts and amounted to 8s. 5d. per ton, which on the presumption that the Society included in its charges all the items named in the coal merchants' figures would seem to point to a saving being possible under an extensive system of co-operation, but it appeared from examination of witnesses before the Commission that the accounts were not made up on precisely the same basis.

CHAPTER VII

THE YEAR 1917

Export of Coal to France and Italy. — Control of Chartering. — Loading Ports specified. — The Gas Industry. — Public Utility Companies. — The Electrical Industry. — Proposal to send British Miners to work in the French Coal-mines. — Fuel Economy Campaign.

‘THE importing power of a nation must, in the main, be dependent on its power to create in its own favour international credits by the export of its manufactures and the raw materials it produces, for when once such credits are created, it can pick and choose between the imports it purchases.’ This clear statement of economic principle made by a Committee appointed in March 1916 by the Chamber of Shipping of the United Kingdom points to the overwhelming importance of our chief export—coal. No excuse, therefore, is required for devoting much space to the consideration of the position which this branch of the coal industry had reached in the years 1917 and 1918, and the means which had to be taken to meet the situation which the War had created.

The scarcity of tonnage had been gradually getting worse, and, with the advent of the unrestricted submarine campaign, soon became acute. To solve the problem a Controller of Shipping was appointed in January 1917, endowed with extensive powers covering the control of the entire British mercantile fleet as well as all shipyards producing merchant vessels.

Organization in respect of the Export of Coal

The export of coal is at all times a complex trade, and the incidence of the War rendered its conduct much more difficult of prosecution, inasmuch as it necessitated the intervention of artificial guidance for the natural flow of trade. The elaborate organization now at work consisted of the Coal Exports Committee, which, though acting under the Coal Control, continued to be very much a self-contained body. There were in addition local and central Committees of Shippers and Exporters (see p. 74)

and Foreign Supply Committees. The six local Committees, as already pointed out (see p. 74), were respectively located at Cardiff, Swansea, Newcastle-on-Tyne, Glasgow, Hull, and Liverpool. Thus, taking the case of South Wales, the Cardiff Local Committee consisted of representatives of exporters, coal-owners, and ship-owners, three members of each being members of the Central Executive Committee of Great Britain for the Supply of Coal to France and Italy. In addition there was a local Licensing and Allocation Committee (see p. 74) sitting (much as the Coal Exports Committee did) each day in rota. Of this Committee, the nine members of the Central Committee were *ex officio* members. In addition to this organization there were the Government Departments specially created during the War for dealing with shipping, viz. the Ship Licensing Committee and the Inter-Allied Chartering Executive. The French Government was represented by the Coal and Freight Department of the High Commissioner of the French Republic in London, and the Bureau des Charbons of the Ministry of Public Works in Paris, the Italian Government being represented by the Comitato Centrale Carboni of Rome, acting through the Italian Coal Committee in London.

The voluntary arrangements come to between the Board of Trade and the shippers and exporters of coal regarding rates and prices of coal to France and Italy have already been mentioned (see p. 73). Early in the year 1917 certain regulations under the Defence of the Realm Act were made bearing thereon, and in March of that year, in a letter to the Central Executive Committee of Great Britain for the Supply of Coal to France and Italy, the Board of Trade drew attention to the regulations affecting the chartering of vessels. As to the control of chartering of steamers under 1,000 tons, a regulation had been made on the 10th of January which laid it down that permission had to be obtained before any non-British steamer over that capacity was chartered either for voyage or for time. A new regulation was now made extending the provision to all steamers, the effect of which was that the chartering of non-British vessels under 1,000 tons was under exactly the same control as the chartering of non-British steamers over 1,000 tons.

As to limitation of freights, all chartering of steamers was under the control of the Inter-Allied Chartering Executive, which from time to time determined what rates were to be paid in order to obtain the services of neutrals. This Executive was not limited by the printed schedule rates of freight, but decided what rates had to be paid according to the state of the market. The schedules, however, remained the basis on which the rates of payment were founded, being varied by the Inter-Allied Executive from time to time by percentages higher or lower according to the state of the market. Competition between districts was obviated by making the percentages applicable to all districts.

There had been some misunderstanding on this matter as well as on the question of rates for British ships. On the latter point the Shipping Controller made it clear that the rates for British, French, and Italian ships engaged in the coal trade were those laid down in the printed schedules of voyage rates, with corresponding rates fixed by the Central Executive Committee for time charters, and if these rates were departed from, it would be necessary to consider the question of requisitioning, the local Committees being requested to report at once to the Shipping Controller any case which came to their notice. All Allied ships had to be chartered through the local Committees, and only ships having a permit from the local Committees were allowed to be loaded.

The question of allocation was an important one. It was decided that the French and Italian Governments would take the sole responsibility of deciding the particular services for which particular ships were to be employed, and would determine the priority in which orders were to be executed, the local Committee allocating the steamers in accordance with the wishes of the French and Italian authorities.

Loading Ports Specified

Early in May 1917 the Controller of Coal-mines drafted and circulated a scheme for regulating the shipment of coal with the object of its taking place as far as possible at the port nearest to the collieries. Thus, taking South Wales for instance, the

output from the collieries in Monmouthshire would go to Newport ; that of the three easternmost valleys of Glamorgan—Rhondda, Taff, Rhymney—was allocated to Cardiff, Penarth, and Barry Docks ; the Llynvi, Garw, and Ogmore, with Avon valleys, would send to Port Talbot ; whilst western Glamorgan and the anthracite field would ship at Swansea or Llanelli. It will be observed that this scheme, the object of which was to secure economy in haulage, was a forerunner of the inland distribution scheme already described at some length (see pp. 101–9), and, although a much simpler matter to carry out than the latter, was not devoid of difficulties. Shorter runs and quicker returns of empties were what was aimed at, for the benefit of the trade as a whole ; but it was realized that there might be embarrassment at some of the docks by their inability either to handle the quantities, or else to guarantee promptness of dispatch. The question arose also of interference with the mixing of coals, a practice which is prevalent in respect of certain classes of coals. But these anticipated difficulties were met in large degree by the scheme not being of a hard and fast character, a certain amount of elasticity being allowed. The Controller in the early summer of this year (1917) appointed in each district an officer to superintend coal transport arrangements, such as the supply of wagons to collieries, transit of loaded and empty wagons, relief of railway pressure by avoiding unnecessary long haulage, and the transference of traffic to canals wherever possible. These officers kept in touch with local Coal Supplies Committees by attending their meetings and being in communication with the secretaries of the Committees of their respective districts.

By the early summer of 1917 the collieries in the exporting districts of South Wales, in particular, were hampered by lack of tonnage facilities, one of the fruits of the submarine campaign. Coal could with difficulty be dispatched to France and Italy, where there was extreme need.

Sundry Problems in regard to Exporting Coal

A few instances may be given of the complexity of some of the problems involved in the reorganization of the machinery of export.

There was the case, for instance, of the exporter or buying agent—the intermediary between the coal-owner and the merchant consumer in respect of export coal—who do the work of making arrangements with collieries for the supply of the coal, with the railways for its transport, with the docks for ‘stemming’ the vessels, providing for Custom House formalities and other details connected with loading. There was the question of the price of bunker coal for steamers conveying coal at limitation freights.

Taking the case of the exporter, what was a fair remuneration for the services rendered by him now that the whole business was regulated artificially? There was the danger of agents buying on behalf of foreign firms competing unfairly with coal-owners selling direct, either by undercutting each other, or by endeavouring to obtain undue preference. Again, it was necessary that importers in France should not be placed in a position in respect of terms less favourable than that of their neighbours. The remuneration of the exporter was fixed at 5 per cent. on the f.o.b. price with a maximum of 1s. per ton, this charge, together with the port dues, being added to the f.o.b. price and paid by the buyers. In addition, they received one-third of 5 per cent. brokerage on freights from the ship-owners, in return for which they relieved buyers of demurrage in loading. Coal-owners selling direct were brought within the definition of exporters. The price of bunker coals in the case of steamers of limitation freights was fixed at a figure not less than the schedule price for export coal with a view, as far as possible, to the maintenance of colliery prices at a fixed level.

Pooling of Export Trade to France and Italy

Towards the close of the year 1917 it was found necessary to evolve a pooling system for the supply of coal to France and Italy, so great was the difficulty encountered by the local Committees in the allocation of business in accordance with pre-war channels. The system decided upon was the pooling of all the business as within the different coaling districts—the Scottish district had done this within that country since August; Swansea commenced pooling on the 1st January 1918; Cardiff, which

included Newport and Port Talbot, decided to pool all the coal export trade to France and Italy as from the 1st January 1918. These were widespread and important conclusions, and a sample of the sort of arrangement made may be given by taking the chief coal-exporting port in the kingdom, viz. Cardiff. The arrangement required the provision of lists of exporters and of the actual shipments to France¹ and Italy for the period 1st January 1913 to 31st October 1916, which were subject to scrutiny and verification by a Committee.

The local Committee for the Export of Coal to France and Italy retained the power of allocating business to any particular firms for carrying out the business in accordance with the scheme, a 'fittage' (i.e. commission) of 1½*d.* per ton being allowed to the firm who carried out each transaction. Any agent commission upon shipments other than those to the Italian Government Commission,¹ which might have to be paid by any of the coal exporters to representatives in Italy for securing business, might be allowed by the Management Committee to the extent of 3*d.* per ton on proof being furnished that the representatives in Italy were entitled to the commission. The exporting firms made a return to the Secretary of the Committee of Management as soon as each cargo was loaded, and, within seven days of the shipment, paid to the Committee the exporter's commission and brokerage, less fittage and foreign agents' commissions, as shown above. But notwithstanding this rule, any firm making a bad debt upon shipments other than those to the Italian Government Commission, made in accordance with the provisions of the limitation scheme, was individually responsible for such bad debt, but was entitled to the return of the money paid into the pool in respect of such shipment. If demurrage was properly incurred by any party to the pool without his default, such demurrage was paid into the pool by the firm effecting the shipment.

The sums received into the pool were divisible among all the approved shippers included in the list *pro rata* to their percentage quantity in the list based upon their returns, the division being made quarterly.

¹ The proposal was devised in the first place to meet the Italian trade, and was ultimately adopted in respect of the French trade also.

In December 1917 the Central Executive Committee of Great Britain for the Supply of Coal to France and Italy, which had been considering the Imports and Exports (Temporary Control) Bill, unanimously adopted the following resolution, and instructed that a copy be sent to the Board of Trade and other authorities :

‘ That the existing powers of control be continued for six months after the termination of the present war, and that if, after the cessation of hostilities, further extension be found necessary, such extension be for not more than six months at a time, and be subject to the approval of Parliament.’

Organizations dealing with the Export of Coal

It will be seen that the control of the export trade had by now become a gigantic business, and the number and difference in the character of the various Government Departments and organizations concerned in its control and direction are eloquent testimony to the importance and complexity of this branch of the coal industry, and the multiplicity of the interests involved therein. There were at least a dozen of these without including the various local Committees, viz. :

1. The Controller of Coal-mines.
2. The Controller of Shipping.
3. The War Trade Department.
4. The Coal Exports (Licensing) Committee.
5. The Ship Licensing Committee.
6. The Inter-Allied Chartering Committee.
7. The Italian Coal Committee.
8. The High Commission of the French Republic.
9. The French Ministry of Public Works (Bureau des Charbons, Paris).
10. The Comitato Centrale Carboni, Rome.
11. The Central Executive Committee of Great Britain for the Supply of Coal to France and Italy.
12. The Coal Licensing and Allocation Committee.

Scheme to send a Contingent of British Miners to work in the Pas-de-Calais Coal-mines

In the summer of 1917 a scheme was evolved having for its object the saving in transport by land and sea on coal for consumption in France: the scheme was to assist in working some of those collieries in the Pas-de-Calais field which were still in French possession, by the transference thereto of British miners. In this project the War Office concurred, as did also the French Government. In order to select the mines at which the men were to work, and make all the arrangements as to housing, rates of wages, and rules generally for the guidance of the workmen, the present writer, accompanied by six representatives of the workmen, visited France in July, and making their head-quarters at Bruay, visited the mines at Marles, Bruay, Nœux-les-Mines, and Béthune, and discussed terms and conditions separately with the French coal-owners and the workmen's Union officials, and arrived at satisfactory arrangements. The scheme was a good one, and would have resulted in a considerable saving; it was, however, not adopted by the War Office, probably owing to the fact that the French miners were being returned from the fighting forces to work in these mines.

What chiefly impressed the writer on the occasion of his visit to the collieries in the Pas-de-Calais field was the courage of the mining population, a courage which seemed almost to amount to indifference. Many of the mines were well within range of the German guns, and some were subjected to periodic shelling, but this did not prevent the men working at them. Thus Béthune No. 10 mine had been heavily shelled and was in a dilapidated condition when we visited it; for instance, one half of the winding engine, which was of the double cylinder type, was out of action. The management endeavoured to work the mine by day, but the smoke from the chimneys betrayed the fact, and the mine was promptly and heavily shelled. They therefore worked it by night.

The managing director of the collieries at Nœux-les-Mines lived near the offices, which were close to one of the collieries, and despite the not infrequent shelling to which the premises

were subjected, continued to reside there until a shell penetrated and destroyed the room adjoining that in which he slept; he then conjectured that it was time that he should remove to other quarters. An incident typical of the fearlessness of the inhabitants in these parts has impressed itself upon the writer's memory: our party had intended inspecting the coke ovens at No. 1 pit at Nœux-les-Mines on Sunday, the 15th of July, but on our arrival at the mines we found they were being heavily shelled, which was, we were informed, a daily practice, the workmen taking cover in dug-outs until the shelling ceased, when they repaired the damage and resumed work on the ovens. We approached within about 300 yards of the ovens and observed that half-way between them and our party were two women and a child standing waiting to cross the fire-zone when the shelling might cease—they were on their way home from Mass.

Fuel Economy

The Controller continued and intensified the fuel economy campaign. In the summer of 1917 he publicly drew attention to means which might be adopted of achieving economy in the use of coal and of avoiding much inconvenience during the next and succeeding winter by giving effect to suggestions relative to the use of electricity and gas power, the use of coke in the locality in which it was produced, the use of coal in stock, and the extended use of gas and electricity for cooking and heating wherever such use would result in a saving of fuel. Factory owners who desired further power were recommended to go to an outside source wherever a surplus was available, so that the total consumption of fuel would not be increased. The curtailment of early and late running of tramcars was advised; and the prevention of waste in water was another direction indicated for saving consumption of coal. Then it was suggested that what may be termed non-essential consumers should be disconnected in order to enable the supply to be continued and extended to munition and other essential users. It was also suggested that the electric distribution systems of generating plants should be interconnected by means of underground cables, or in suitable cases by temporary overhead wires over the inter-

vening country so as to enable one or two of the most economical power stations in each district to supply several towns at light loads, instead of each town having to run its own power station uneconomically at such times (see p. 81).

These proposals were largely in the nature of pious opinions, and the advice given might or might not be followed. The proposals were in the nature of war measures and necessarily temporary in character. They did but touch the fringe of the great subject of prevention of waste on the getting and use of coal.

In an admirable leading article on the question of coal economy the *Colliery Guardian* (the 3rd August 1917) pointed out that: 'with regard to domestic economy, we do not think that the pace can be forced in this direction. The question is one that will largely solve itself by natural evolution. Schemes of coal rationing, such as the Coal Controller has in view for the supply of the London area during the winter, are prompted not so much from the motives of preventing extravagance as for the purpose of maintaining supplies for small consumers.' In other words, the supply for domestic consumption was limited, and the Coal Control scheme sought to make the supply go round so that every one might have a fair share—necessity was the fuel economizer in this case.

The linking up of electrical undertakings was largely resorted to and undoubtedly did result in the saving in consumption of a considerable quantity of coal.

CHAPTER VIII

THE YEAR 1917 (*continued*)

The Supply of Material to Collieries. — Pit Wood, Plant, and Machinery. — Priority. — Feeding of Pit Horses and Ponies.

THE work devolving on the Production Branch of the Coal Control soon became such that it was necessary to divide it into sub-sections in order that the work might be carried on with the greatest efficiency. The sections were: (*a*) Labour and Wages; (*b*) Recruitment; (*c*) Supply of Plant and Machinery; (*d*) Pit Wood; (*e*) Horses and Ponies; (*f*) Coal Control Agreement Questions.

Since the outbreak of the War the Home Office mines inspectors, whose province is the inspection of all mines and quarries in the United Kingdom from the point of view of health and safety, and who are a band of able and experienced men recruited from the ranks of mining engineers and entering H.M. Civil Service by examination, had in addition to their proper duties acted in an economic capacity as well, and, being unofficially during 1915 and 1916 the provincial agents of the Coal-mining Organization Committee referred to in the earlier chapters of this volume, provided the Chief Inspector with fortnightly reports relative to the condition and requirements of the mines in the several divisions.¹ But their number on the active list had been considerably reduced by recruitment for the army, and those remaining were in consequence greatly overworked. Furthermore, the Coal Control was a department apart from the Home Office, and its work being of an economic character required that a special class of officers should devote the whole of their time to the work of

¹ For the purpose of the administration of the Mines and Quarries Acts, the United Kingdom is divided into six divisions, viz.: (1) Scotland; (2) Northern; (3) York and North Midland; (4) Lancashire, North Wales, and Ireland; (5) South Wales; (6) Midland and Southern, each of which is under a Divisional Inspector with a staff of Senior, Junior, and Sub-Inspectors of Mines, Sub-Inspector of Quarries, and Inspector of Horses.

the Production Branch of the Coal Control. The country was therefore divided into five areas for the purposes of the work of this Branch, and a mining engineer, known within the Control as a 'Production Inspector' or 'Economic Mines Inspector', was placed in each district, and acted as the connecting link between the Production Branch and the several districts. These inspectors reported to head-quarters and carried out the instructions delivered to them by the head of the branch. They met monthly in conference at head-quarters under the chairmanship of their chief, and discussed matters of policy and administration with mutually advantageous results.

Supply of Materials to Collieries—Pit Timber

Allusion has already been made (p. 47) to the organization effected in the year 1916 towards securing a cheaper and more plentiful supply of pit timber for the mines of Great Britain. With the passage of time the position became more grave, for pit timber, it should be observed, had, early after the outbreak of the great conflict, been declared by the enemy contraband of war, and though at no time were our supplies from foreign sources entirely cut off, the supply was seriously restricted by reason of the shortage of shipping, due to the activity of the submarine campaign. That from the Baltic ports was almost completely cut off, but increased contributions were forthcoming from France, Spain, Portugal, and Newfoundland, and from our own forests.

The quantity of pit timber consumed at the collieries of the United Kingdom is equivalent in point of weight to about 1·7 per cent. of the total weight of coal raised; and the supply from foreign sources normally required for its transportation about 3,600,000 tons of shipping per annum, a fact which under the conditions prevailing in the years 1917 and 1918 constituted a very serious matter. The shipping available had to be carefully apportioned, and the Board of Trade, at the request of the Controller, issued instructions requiring pit-wood importers to procure a special licence from the Department of Import Restrictions for permission to import mining timber, the prime motive of this being to effect the necessary saving in shipping tonnage. With the same object in view, the more rapid development of

the home timber resources became a matter of great moment, and the coal-owners were urged to form themselves into timber associations for the purpose of purchasing standing timber and working it for the benefit of the mines. The timber Committees mentioned on p. 47 were continued in operation, the Controller being represented thereon by means of the Economic Mines Inspectors district by district. The objects of these Committees were to encourage the formation of Mine Timber Associations to work the home supplies of timber and to see that the needs in respect of timber of all the mines were safeguarded ; in fact in this relation they were the agents of the Controller.

There was a supply of timber in the woods and forests of the country sufficient to meet the demands of the mines for a long time, though the estimates which were made in various directions varied greatly as to the length of the period, some putting the supply as sufficient for one year, some for three years, including both hard and soft woods. It was calculated that in Scotland alone existing crops of coniferous wood were sufficient to supply from 25 to 30 per cent. of the ordinary annual consumption of pit timber in the coal-mines of Scotland.

By the summer of 1917 some of the English mines were in a precarious condition regarding their timber supplies. In particular it became necessary to institute a system of weekly reports as to the position in respect of timber supplies at the mines in South Wales, where the want was chiefly felt and where some mines had occasionally actually to cease work for a day or more on account of the dearth of timber. A strong timber association had been formed in South Wales by ninety collieries. In other districts also extensive areas of woodlands had been acquired and were being worked. But the main difficulty in the way of deriving greater relief from these sources of supply was the prevalent shortage of labour for felling, trimming, and hauling the timber, and the insufficiency of lorries for conveyance of the wood to the railways. Many of the young, vigorous, and expert timber men had been drafted into the army, and although some check was put upon their recruitment in 1916, which was intensified in 1917, it was found necessary to transform colliers into woodcutters for the purpose of speeding up deliveries of

wood. Canadian lumber men were also drafted into the country for the purpose of instructing our temporary woodmen in the art of woodcraft and also for carrying out the work themselves. Groups of German prisoners had been arranged for as far back as the summer of 1916, and eventually some two or three thousand Germans, many of whom had been woodmen in civil life, were employed in felling timber in the woods and were paid a reasonable wage for their work, the mode of life proving a welcome change to that which they had recently experienced. Special terms were given to the miners for cutting and dressing timber with a view to inducing them to enter upon the work, and in March the South Wales Association alone issued a call for 3,000 men for timber work.

Sir Bampfylde Fuller, a distinguished ex-Anglo-Indian Civil Servant, had been appointed Controller of Timber Supplies about the same time that the Controllershship of Coal-mines was established, but he resigned and was shortly afterwards succeeded by Mr. James Ball,¹ a well-known railway engineer. Until the time when the greater part of the work was transferred, by mutual agreement, to the Timber Control, the supply of timber to the mines had constituted an important section of the work of the present writer. Thereafter the Timber Controller, having taken over the timber staff of the Production Branch, worked in conjunction with the Production Branch of the Coal Control in so far as mines were concerned.

In July 1917 the Controller of Timber Supplies announced that arrangements had been made for licensing the importation of a further 50,000 tons of pit props to be shipped to this country from Scandinavia in neutral vessels, making, with a previous concession, 100,000 tons in all, of which 75,000 tons might be imported through the Humber ports for the midland collieries (which were getting short of timber at this time, as compared with the north of England) and the remaining 25,000 tons through ports between the Tyne and the Humber.

In December 1917 the Controller of Coal-mines, after consulting the Controller of Timber Supplies, issued directions regarding stocks, prices, and contracts relative to pit wood and

¹ Afterwards Sir James Ball, who died in 1920.

other mining timber, the objects being to secure an equitable distribution of the available supplies of pit timber and to fix maximum prices of pit timber so as to prevent 'profiteering' on the part of the timber merchants.

Plant and Machinery Priority. The Minister of Munitions, in the exercise of the powers conferred upon him by the Defence of the Realm Regulations in March 1917, required that all persons engaged in any of the trades, businesses, or industries specified in the order as to priority which he issued on the subject should comply therewith. At first there were for the purpose of the order three classes of work.

Class 'A' covered Government contracts and work on a contract or order of the Admiralty and work which the Minister of Munitions had certified to be war or munition work, or had directed to be treated on an equality therewith; and merchant shipping work certified by the Board of Trade to be munition work. There were degrees of priority within this class.

Class 'B' comprised work or material wholly required for :

- (a) Repairs to existing industrial machinery (but not for the replacement of old machinery by new) wherever essential to maintain continuity of operation in the United Kingdom.
- (b) The maintenance of reasonable stocks of materials or articles necessary as component parts of work or goods to be carried out or supplied under any orders or contracts to be executed under Class 'A' or Class 'B'.
- (c) Export orders, certified by the Board of Trade, the Admiralty, the War Office, or the Ministry of Munitions to be of sufficient national importance to be specially approved for export to approved destinations, and as to which the Ministry of Munitions or other Government Department controlling the necessary materials had certified that such materials could be spared.
- (d) Contracts or orders certified by the Admiralty, the War Office, or the Ministry of Munitions as necessary for the efficient conduct of the war.
- (e) Contracts or orders certified by the Director-General of National Service to be of sufficient importance in the

national interest to be placed in Class 'B', and as to which the Ministry of Munitions or other Government Department controlling the necessary materials had certified that such materials could be spared.

Class 'C', which comprised all work not comprised in Classes 'A' and 'B'. In respect of orders under Class 'C', no certificates were issued.

Later on, the various grades of priority were recast; thus towards the close of 1917 and early in 1918 there were six grades in use, viz. :

Class 'A'—P. 1, P. 2, P. 3, P. 4.

Class 'B'—P. 5 and P. 6.

Class 'A', P. 1, P. 2, and P. 3, were usually reserved for direct war work; but in cases of urgent necessity, such as breakdowns of essential machinery for production, P. 3 certificates, and on rare occasions, P. 2 certificates, were issued, but special application had to be made for such to the Ministry of Munitions. There was issued to collieries what was styled a 'Breakdown Certificate' under P. 4, and also a General Maintenance Permit P. 5, which enabled them to get small stores, the latter certificate being issued for periods of three months.

Coal-mines were included under Class 'B (b)', and later on B P. 5, so had a fairly high order of priority.

The earlier method of procedure adopted in respect of mines had been that the 'Production' or 'Economic' inspectors reported to Coal Control head-quarters as to the degree of urgency of applications from the mine management, colliery by colliery, within his area; and the head of the Production Branch, acting through his representatives attached to the Priority Committee of the Ministry of Munitions, took the matter up with that Committee, which was in constant session. But the revision of the priority certificates simplified this somewhat cumbersome procedure, though in all large or important applications for plant the support of the inspectors attached to the Production Branch of the Coal Control Department was still invoked.

The greatest stringency felt was in respect of the supply of electrical appliances, and a census of probable requirements

for one year ahead was made at all the mines with a view to arriving at some basis of allocation. In December 1917 it was necessary to draw the attention of the inspectors and of the colliery owners to the general and serious shortage of materials used in colliery work and urge upon them the necessity of the utmost economy being practised in the consumption thereof, more especially in the use of steel, which was now being rationed by the Steel Allocation Committee of the War Priorities Committee, the allocation to the coal-mining industry being on the basis of 1,000 tons of joists (girders), 500 tons of steel plates under three-sixteenth inch, and 500 tons of steel plates over three-sixteenth inch per four weeks, which marked a great decrease in the normal consumption. The colliery owners were informed by the Production Branch of the Coal Control in February 1918 that the position in regard to steel and other materials was becoming increasingly acute owing to the requirements for direct war purposes of the various war departments, and that the amount available was not sufficient to meet all demands; that it was essential, therefore, that the management of collieries should, so far as safety and the requirements of the Coal-mines Act would allow, do everything in their power to restrict the use of materials of all kinds. Means whereby the demands might be reduced were indicated, as for instance :

The practicability of using timber reinforced with old iron rope for bars to support the roof and for like purposes. Resort to arching in preference to the use of girders. The use, too, wherever available, of old rails and other suitable steel scrap as mine supports. The recovery from disused workings of pit rails, these to be put in use instead of making fresh purchases. The discouragement of the use of steel sleepers. The cessation, wherever practicable, of the use of steel in the construction of pit tubs (underground trams for the conveyance of coal). In constructional work the substitution, wherever possible, of brickwork or masonry for cast iron or steel. Where the erection of steel structures was in contemplation, the study of the possibilities of reinforced concrete was advocated as a means of saving steel, but reinforced concrete was not to be resorted to where brick-

work or masonry would suffice for a given purpose. Regarding boilers, the policy should as far as possible be to repair existing boilers rather than to acquire new or additional boilers. The Controller was to be notified at once of all surplus steel or possible metal substitutes, cables, or other copper or brass scrap not required in the near future. The mine management was requested, in respect of the use of steel or possible substitutes, to give priority to immediately (coal) productive work over development work; and as to improvements and alterations to plant as distinct from essential repairs involving the use of materials and skilled labour in engineering shops, they were asked to postpone carrying out these until after the War. Every care was to be taken to restrict the use of copper, lead, and brass; and lead should only be used for covering electric cables where the conditions rendered a lead sheath essential.

Candles. To the ordinary reader—the ‘man in the street’ as he has come to be called—the organization of the supply of material to collieries may seem a somewhat insignificant matter to dwell upon at length in comparison with the great world events which were happening at this time; the reply is that it was only by the perfection of this organization that the collieries were kept going, and ‘Coal won the War’.

As to the materials other than the metals, in many so-called ‘non-fiery’ mines—that is, mines from which inflammable gas is absent—candles or open oil lamps are in use instead of safety lamps. The position in regard to candles was that tallow candles were unobtainable unless made from deglycerined tallow. The position in respect of wax candles was also a difficult one, but the Oils and Fats Department were asked to give colliery applications priority over all domestic supplies and to make them secondary only to the requisitions of the tunnelling corps at the front. The Oils and Fats Department agreed also that colliery companies might obtain supplies of colza oil (largely used for lamps) on their General Maintenance (P. 5) certificate. The strictest economy had to be practised in the consumption of the grease used in lubrication of trucks, pit tubs, &c.; but the Munitions Oil Production Department, on being approached

by the Coal Control Department, saw to it that the supply to the collieries was put on a secure footing.

Horses and Ponies. There were at this time 60,000 horses and ponies employed at the mines of the United Kingdom, chiefly at the coal-mines and mostly underground. The food-stuffs consumed by these animals, consisting chiefly of hay, oats, maize, and beans, amounted to a considerable item; not only, too, had it risen greatly in price (see p. 43), but, owing to the demands imposed by the military forces at home and abroad, there was a shortage in hay, and the restriction of imports, due to the activity of enemy submarines, and the demands for corn for food purposes, conduced to a limitation in the supply of feeding stuffs available for horses and ponies. It soon became apparent that these must be rationed, and a small Committee of experts (drawn from the Advisory Board), under the Chairmanship of the present writer, drew up a rationing scheme.

The daily ration arranged was, for pit ponies of 14 hands and under: hay 6 lb., straw 3 lb., and oats 9 lb.; but as from the 1st of October a winter ration commenced, which allowed of hay 9 lb., straw unlimited, and oats 11 lb. For colliery horses, such as light draught horses, the ration was hay 12 lb., straw unlimited, oats 16 lb. The summer ration was barely sufficient, and owing to the quality of the food in some cases not being up to the normal, the ponies and horses were under-conditioned. The winter ration was sufficient to allow of the animals doing a good day's work, provided the quality of the food was kept up. As to what constitutes the proper feed of pit ponies, one may take the case of a large colliery in the county of Durham. At this mine the composition and weight of the feed was as follows:

	<i>Prior to the War</i>	<i>In January 1918</i>
	lb.	lb.
Oats	4.15	5.33
Maize	3.93	1.34
Beans	1.25	0.09
Total	9.33	6.76

In addition, of course, there was the hay in the form of chaff, on the amount of which before the War no limit was placed. Hay and fodder were now under the control of the War Office

Forage Committee, of which Brigadier-General Morgan was Chairman, and an arrangement was come to with him whereby a distribution of supplies would be arranged, a nominee of the Forage Department being appointed for each colliery district to make the allotment. The supply of horses also came under a Controller, and licences had to be obtained to purchase. It might be asked, in these circumstances, why not have substituted to a greater extent mechanical for horse haulage? Well, the shortage of food-stuffs and the difficulty in getting horses *were* used as a lever for introducing mechanical haulage; but it was a question of a balance of necessities—steel versus horseflesh. Originally a policy had been agreed upon between the Production Department of the Coal Control and the Ministry of Munitions to the effect that pony haulage should not be displaced unless in cases of grave necessity. There are many cases, too, in mining, in which it is not practical to substitute mechanical for pony haulage.

Second-hand Plant. A section of the Production Branch was established to deal with the retention in the coal-mining industry of plant and machinery which had been thrown out of use owing to the closing of collieries (an occurrence which occasionally took place even during the War period). This was done with the knowledge and approval of the Ministry of Munitions. The closing of collieries was a fruitful source for obtaining second-hand machinery. It was advisable that the industry should retain this, and instead of colliery owners being obliged to buy second-hand mining machinery at exorbitant prices from dealers, it was hoped, by the aid of this section, the middleman's profit might be eliminated and the machinery transferred at a reasonable price. No additional staff was employed in the work of the section, so the nation was put to no extra charge. The *modus operandi* was as follows: When a colliery was closed down the fact was notified to the officer in charge of the section, and there was dispatched to him from the colliery in question a schedule of the machinery to be disposed of; he then, being already provided with a list of the requirements of the various working collieries, brought together the intending purchasers of any particular kind of plant, and the owner of the closed or closing colliery; that is to

say, the section acted as a clearing house, assisting to put plant into use without undue delay instead of its lying idle over a long period. The proposal was extended to include any colliery which was in possession of plant beyond that required for the maintenance of its existing output or to bring it up to a pre-war level. The plant might in such cases be transferred to other collieries on a basis arrived at as follows : the two parties were instructed to endeavour to arrange a price, but, failing agreement, they should within one month of the date of failure mutually agree upon the appointment of a valuer to decide between them. In the event of their not being able to agree upon such an appointment, a valuer was to be appointed by the Controller of Coal-mines, whose decision should be binding on both parties.

CHAPTER IX

THE YEAR 1917 (*continued*)

Recruitment. — Mobility of Labour. — National Service. — Industrial Unrest. — Wages Questions. — The War Wage.

Recruitment of Miners for Military Service, 1917-18

THE position in respect of persons employed at the coal-mines in the United Kingdom and the total number of coal-miners who had joined the forces from the outbreak of war to the end of January 1917 was as follows :

Approximate number of persons employed at coal-mines	.	.	.	1,116,600
Number of persons who had joined His Majesty's Forces	.	.	.	289,700
				or 25·9 per cent.

The 'combing-out' policy which was instituted in the year previous (see p. 54) was still proceeding. On the 1st February 1917 the then Home Secretary (Sir George Cave)¹ received a deputation of the Miners' Federation on the subject of recruiting of miners, when they were informed that the Government had come to the conclusion that 20,000 men could be taken from the mining industry for active military service, and that the method proposed would be to choose men fit for military service from those who had come into the mines since the 14th August 1914, from men who had a bad record in regard to avoidable absenteeism, and from surface workers for whom substitutes would be found from among men of a lower military class or above middle age. As a result of representations made by the workmen's representatives, it was finally agreed that the decision to withdraw the certificates of persistent absentees should not apply retrospectively. The War Office unfortunately failed in the matter of substitution, only a small number of satisfactory substitutes being forthcoming ; the large pool of efficient men from which these were to be drawn would seem to have been a matter more of imagination than of reality.

¹ Now Viscount Cave, a Lord of Appeal in Ordinary.

When the Coal Controller entered upon his duties, one of the matters requiring immediate attention was a requisition from the War Office, which had received the imprimatur of Government, for 20,000 men from the mines for the army by the 9th of May, and another batch of equal number by the end of July. These men would have to be drawn from the underground workers, as the surface labour had been so depleted that it was impossible that any more could be spared therefrom. The arrangement which the writer proposed was what may be termed the territorial scheme, namely, the enlistment quota of each colliery should be brought up to the average of the district in which the colliery was situated. This adjustment (and any increase in the aggregate quota from the various districts which might be found to be necessary) was to be effected by taking first the single men in the lower groups 18 to 23 or 25, excluding certain essential classes such as putters and electricians, and proceeding thence, if necessary, to recruit single men from the higher age groups and the married men from the lower age groups. If it was found that the arrangement in force for obtaining the 20,000 men asked for did not result in the recruitment of the men who entered the industry since the 14th August 1915, such men would be included in the first group to be called up under the existing scheme. The object and the effect of the scheme was to save those collieries with a high percentage of enlistment from further denudation of labour, and the proposal to take the physically fit among the young single men would cause the minimum of economic hardship. This scheme, which was acceptable to the military authorities, was accepted by the Controller and sanctioned by the Government. It was desirable that the scheme should also secure the concurrence of the miners, and it was accordingly laid before the Executive of the Miners' Federation for an expression of their views. The National Conference of the miners, held in April, decided to advise the Government to extend back to August 1914 the 'combing-out' of those who had gone to the mines from other trades, and referred to the Miners' Executive Committee the consideration of the scheme just adumbrated. The Executive did not report on the scheme until June, when they expressed considerable agreement therewith, but requested that the Colliery

Recruiting Courts in deciding a man's case should have due regard to his family circumstances, and ' that a full list of names of those who are to go before the Military Recruiting Courts to make up the 12,183¹ additional men required be supplied to the workmen's representatives ' and ' that Clause A, under the proposals of the Coal Controller dealing with the exceptions of underground putters and trammers, be deleted '.

In August the Controller of Coal-mines produced the following figures relative to the recruiting scheme, and supplied them to the Miners' Federation :

Number of men ordered by the War Cabinet to be found for the army	40,000	
		40,000
Number of those who voluntarily enlisted up to the 30th of May	10,695	
Number estimated to be fit for general service, to be obtained on Forms 17 and 18, who were not posted before the 31st of May	6,074	
The number estimated as the result of Form 20	2,487	
Total		19,256
Deficit		20,744

So that 20,744 men would have to be raised under the revised balloting system, and this was resorted to.

The putting into effect of these recruiting arrangements was not unaccompanied by friction. There was unrest and strikes were threatened in some colliery districts, notably in South Wales, whither General Smuts went in October and addressed the miners who were threatening to lay the whole of the South Wales coal-field idle. A vote of the men actually being taken on the point, the majority were found to be against a ' down tools ' policy— ' direct action ' as it has euphemistically come to be designated.

Mobility of Labour—National Service

In the summer of this year the Controller, acting under the advice of the Production Branch of the Control, put before the colliery owners and workmen a proposal for making labour in the industry more mobile, the object being to secure greater regularity of work by setting up mining labour mobility bureaux for transferring labour from districts where it was unemployed to districts which were short of miners. The question was con-

¹ The balance of the 20,000 required.

sidered by the Advisory Board, and, as such transference of labour involved the close examination of the wages rates and working conditions in the districts to which the transfer would be made, it was advised that the matter would probably be more effectively handled by the coal-mining industry itself rather than by the outside agency of Government Departments. It was felt by the Board that the fundamental principle must be that the men transferred (with their families whenever possible) should be in no worse position than they were before transference, and that the best thing would be for certain of the District Miners' Unions to set up the mobility bureaux, all of which could be linked up by some central bureau run by the Miners' Federation of Great Britain, requisitions being sent to a bureau in the district in which the colliery wanting labour was situated, which bureau would then ascertain from the Central Bureau from which districts men could be spared.

The scheme was placed by the Controller before the Miners' Federation of Great Britain in July and ultimately accepted by them at a conference in December, and negotiations thereupon were begun with the Miners' Federation as to subsistence allowances, railway warrants, &c., and the next year was well advanced before the scheme was in working order; but the negotiations involved the goodwill and concurrence of so many interested parties, both official and unofficial, that the scheme never came into fruition (see p. 184). This was much to be regretted, as it contained within it the germs of permanent utility for the coal-mining industry, which has always been subject to great fluctuations in employment, in supplying its widely different demands—export, household, gas coal, and others.

It was considered, too, that an effort should be made to utilize substitutional labour to replace men from the collieries who had joined, or might in the future join, the army. Arrangements had been made between the Ministry of Labour and the Ministry of National Service¹ (the latter an organization created by the exigencies of the War and ceasing with the War)

¹ The Ministry of National Service was now under Sir Auckland Geddes, the present British Ambassador to the United States of America, Mr. Neville Chamberlain having resigned. Sir Auckland had a seat in Parliament, which Mr. Chamberlain had not.

whereby all vacancies for labour (whether by way of substitution or otherwise) were to be notified to the employment exchanges, by which means it was hoped to ascertain the total effective demand without duplication, and, on the basis of this information, to arrange for utilizing in the most advantageous manner all available sources of labour at the disposal of either of the Departments. The colliery owners were circularized on the 18th of October to this effect, and asked to forward to the Employment Exchange for the district in which the colliery was situated a precise statement of the number of men they could individually employ, the class of men required, the nature of the work to be done in each case (indicating as fully as possible the amount of skill required, if any), and the ordinary terms and conditions of employment, duplicates of the returns made to the Exchanges being sent to the Controller of Coal-mines Department.

Though some small measure of relief was afforded by this machinery, it cannot be said that it was a success. The labour available was not suited to fill the wants at the collieries except in a very few cases. Once a miner always a miner, and practically no ex-miners were forthcoming. The class of labour which the Labour Exchanges could produce was mainly that which could be applied to cleaning and screening the coal and to odd jobs about a colliery, the very class of work which, being carried out as it was mainly by old men, youths, women (to a large extent by the last named in Lancashire and Scotland), or men below military standard, had suffered least from depletion by recruitment for military service. It was possible, however, in a few cases to pass on able-bodied men employed in this work to other jobs and fill their places with substituted labour.

Industrial Unrest—Increased Cost of Living

A Commission of Inquiry into Industrial Unrest appointed in June of this year completed its work and presented its report late in July 1917, that is, within the remarkably short period of six weeks. Perhaps the most important fact emerging from this inquiry was that it appeared to be a matter of general agreement that the main causes of industrial unrest were due to the increased

cost of living—this cost having advanced at a greater rate than the increase in wages—a sense that certain sections of the community were engaged in profiteering, and that the rise in the prices of some of the commodities necessary to existence could not be entirely, or even mainly, attributed to results of the War. The Commissioners made important recommendations, some of which peculiarly affected the mining community, as, for instance, those relating to the establishment of Industrial Councils, increase of output, housing problems, suggestions as to copartnership and closer contact between employees and management, all of which have since engaged or are still engaging the attention of the authorities. The Industrial Councils which it was proposed should be set up, and which came to be known as ‘Whitley Councils’, after the name of the Chairman of the Committee, are alluded to later (see p. 208).

Wages

At the commencement of 1917 there were no outstanding acrimonious disputes in regard to wages in the coal-mining industry. In September of the preceding year discussions had been proceeding between Lord Milner, the Miners’ Federation of Great Britain, and the coal-owners, with a view to establishing wage rates which should remain unaltered during the period of the War, the price of coal likewise continuing unchanged so that the balance might be preserved. This desideratum was not achieved. It necessitated for its consummation that the cost of living also should not rise, and to ensure that this could be so would have required that the wage rates in all other industries and the price of all commodities should remain stationary. Difficult as it would have been to accomplish, this might have been effected by the Government, even at this late hour, and would have been a masterly achievement. It would, of course, have meant the temporary subsidizing of many, perhaps all industries, but it would have resulted in less ultimate expenditure of money and an absolute prevention of strikes and stoppages with the vast consequent waste.

At a meeting of a deputation of the Miners’ Federation of Great Britain with the Prime Minister on the 21st December 1916,

the President of the Miners' Federation, Mr. Smillie, made it quite clear that the miners' leaders did not desire to take advantage of the difficulties of the nation to force up coal prices, although doing so might have the effect of putting up the wages of the miners. He said further: 'If it is possible for the Government to do anything—which I hope they will be able to do unless there is something extraordinary turns up—to reduce the cost of living, I do not think the miners have any desire at all to force up wages at the expense of the nation.'

Again, at a meeting which the representatives of the Miners' Federation had with the Prime Minister as late as June 1918, at which the writer was present, Mr. Smillie said: 'I do not think there will be any further claim for an advance unless there is an increase in the cost of living, making it impossible for us to go on.'

The position at the outset of the new year (1917) in respect of wage rates and labour generally in the different districts was as follows:

In Scotland, at the end of August 1915, Sir G. Askwith had awarded the miners a $6\frac{1}{4}$ per cent. advance on the 1888 standard, since when there had been neither advances nor reductions in wages.

In Northumberland, where the percentage rise and fall of wages above standard is governed by the average selling price of coal, the men had suffered in January an 11 per cent. reduction; and in April 1917 it was agreed that wages should remain unaltered, viz. at 120 per cent. above the 1879 basis.

In Durham the Coal Conciliation Board decided, on the 9th February 1917, that wages should remain unaltered, viz. at $107\frac{1}{2}$ per cent. above the 1879 basis, during the ensuing three months.

In the 'Federated' area (see p. 56) a meeting of the Coal Conciliation Board had taken place in October 1916 to consider an application from the men for a further increase in wages. Up to that date the wages paid to the miners within the area were at the maximum percentage under the existing agreement, which agreement was for the duration of a period of three years as from the 1st May 1915, and in addition there was being paid

a war bonus, under what was known as the Asquith Settlement, to meet the higher cost of living. The continued rise in the cost of living, and the advances granted in other coal-fields, were the causes of the demand. The meeting adjourned without any decision being arrived at.

As to the South Wales coal-field, the Board of Trade had, on the 29th November 1916, undertaken to ascertain independently and without loss of time the cost of producing the coal. But two months having elapsed, the owners of the collieries advised the Board of Trade that they learned 'with great disappointment that no instructions to the accountants have been given' and entered 'a strong protest against the inaction of the Board of Trade in not proceeding with the audit'.

There were at this time no means, short of a very elaborate and lengthy process of returns from collieries, of ascertaining the position in respect of the increase in workmen's wages; but it is possible to show what had been the percentage advances and reductions on standard rates of the coal-hewers' wages, which is some indication of the position of wages in the coal trade. These, since the commencement of the War up to August 1917, were as shown in Appendix IX.

Such was the position of affairs in respect of wages when the Controller entered upon his duties and for some time thereafter. But on the 8th of August 1917 the Miners' Federation decided to apply to the Controller for an advance of 25 per cent. on wages applicable to the whole industry, basing their application on the rise in the cost of living. Two noteworthy features present themselves in connexion with this application. Whereas, hitherto, movements in wages had been negotiated by district organizations, and the advances and reductions were of local application, this demand was national in regard to the coal-mining industry, and for the first time the Government and not the colliery owners were approached by the miners.

The application related to all miners in the Federation, including coal, stratified ironstone, and clay miners, limestone quarrymen and surface workers at the mines; but the Controller of Coal-mines was only concerned with the application in so far as it related to the persons employed at coal-mines, who, however,

formed well over 90 per cent. of the total. The Departments concerned with the other workers covered by the demand of the Miners' Federation would, of course, have to adopt any decision the Cabinet might arrive at in respect of the coal-mines.

The general cost of living on the 1st August 1917 stood at 80 per cent. above the figure ruling on the outbreak of the War, whereas the standard rates of miners' wages had advanced only about 40 per cent. (e. g. Northumberland 47, South Wales 46, Scotland 43, Federated Area 33). What the Federation asked for was equivalent to a further rise of 35 per cent., making 75 per cent. in all (see fig. 4, p. 240). In other words, they claimed to be put roughly in their pre-war position. But it has frequently been maintained that, owing to changes in the basis rates of wages and in other ways, the actual earnings of miners have generally increased more than the percentage figures indicate. Up to the period under review, however, no statistics were available to demonstrate the truth or otherwise of this assertion. Figures were taken out in regard to sixty of the larger undertakings, selected from all districts, with an aggregate output of 42 million tons or about one-sixth of the total national output, which demonstrated the seriousness of the financial effect of an increase of one-quarter in the wages of the miners. The profit for 1916, with wages at the highest point, of these undertakings would be nearly $6\frac{1}{2}$ million pounds sterling; an increase of one quarter in the wages cost would reduce this profit to $1\frac{1}{2}$ million pounds sterling, and the effect on the smaller undertakings would be relatively greater.

It is interesting to examine some of the items in the increased cost of living at this time. Five per cent. was due to taxation. Bread was to be reduced to 9d. a loaf, which meant a reduction of 5 per cent. in the cost of living, and the prospective regulation of meat prices would probably mean a reduction also of 5 per cent. Meat is an especially important item in the miner's budget (as he is in certain districts housed free or at a cheap rate, and in many districts receives an allowance of coal either free or at a very low price). The action foreshadowed by the Food Controller in regard to other articles also had to be taken into account, though it was not possible at the moment to estimate its effect. Taking one thing with another, the Controller concluded that it would be

fair to put the increased cost of living in the case of the miners at 60 per cent., to meet which would require an all-round increase of wages of nearly 15 per cent.

The representatives of the miners met the Controller of Coal-mines early in September, when he pointed out that if this application were acceded to it would impose a serious burden on the whole community by further augmenting the cost of living, to which the miners' leaders replied that they neither expected nor desired any concession which might be made to be used as a reason for increasing the price of coal. But it is difficult to see how the wherewithal to meet the advance would be provided if the price of coal were not advanced, unless the Government were to take it out of the pool (see p. 95), for the financial guarantee to the colliery owners could not be abrogated, and if the pool could not supply the funds for the advance, without encroachment on the objects for which it was created, then it would mean that the burden would fall on the taxpayer, who is usually the ultimate sufferer in these matters.

Eventually the Controller of Coal-mines, with, of course, the approval of the Cabinet, offered a war wage of 1s. 3d. a day to all colliery workers of 18 years and upwards, a proposal which, constituting as it did a flat rate increase to all workmen alike, introduced a new method of payment into the industry. The principle met with the approval of the Miners' Federation, but the Executive was instructed to press for an advance of 1s. 8d. per diem to men and 10d. for boys. As a result of further negotiations, the offer of the Controller took the form of 1s. 6d. per diem for men and 9d. for youths under the age of 16 years, and was unanimously accepted by the miners on the 27th of September.¹

The wage was payable in the case of a mine being laid idle for lack of trade. Again, in those districts where the working week is five days and those in which eleven days constitutes the working fortnight, complications arose. It was agreed that wherever the custom of a district was to work only five days

¹ The terms of the agreement, and the rules which were made in respect of the payment of the 'war wage', as the flat rate came to be called, are of a technical character with which it is not necessary to burden the general reader. Those who are desirous of further pursuing the subject will find the terms set out in full on pp. 498 and 850 of the *Colliery Guardian*, 2nd November 1917.

a week the bonus should be paid for a full week, that is to say, as if six days had been worked ; but in the event of the workman being absent from *avoidable* causes on one of the working days, only four days would be paid for. An additional payment was made in respect of overtime worked under the emergency clauses of the ' Eight Hours ' Act.

To meet this advance it was necessary to increase the selling price of coal, and an estimate was made to ascertain what the increment should amount to. The figure arrived at was 2s. 6d. per ton, which subsequent experience demonstrated to have been too high a figure in respect of some collieries and too low in regard to others, the probability being that, on the average, it was on the safe side. It was impossible to calculate other than on the average. The figure was subject to a good deal of criticism on the part of the miners' leaders, who contended that the increment in the selling price was excessive, some indeed going so far as to maintain that no increase at all was warranted, but that of course was not so.

The maximum selling price in all districts was therefore advanced by 2s. 6d. An advance of that amount had already been in force in respect of coal mined in the South Wales and the Forest of Dean coal-fields since January 1917.

The agreement with the Miners' Federation precluded an application for an increase in wages on the ground of an advance in the price of coal due to the war wage, even if the price in any district was raised sufficiently to justify, under the Conciliation Agreements, an increase of more than the war wage.

The principle of the payment of a flat rate has been severely criticized by the managers of collieries (and others well able to judge of its effect as militating against production), as being an abrogation of the principle of payment by results. On the other hand, there is the fact that the advance was one made to meet the cost of living, equally incident on all classes of colliery workers and not therefore logically met by a percentage rise on wages. A percentage rise would have had the effect of greatly enhancing the wages of piece-workers and, if there is anything in the argument that a wave of low production follows the wave of advancing wages, would have conduced to a decrease in output and a conse-

quent advance in the cost of production. Further, the principle of the payment of a flat rate commended itself to the general body of the miners, and they were prepared to accept a lower advance in consequence, for the war wage, it has been estimated, amounted to about a 20 per cent. instead of a 25 per cent. advance. The writer offers no personal opinion in the matter, other than to say that certain conditions and extensions which the Controller eventually made under pressure in respect of the payment of the war wage did constitute an inducement towards slackness of work on the part of a dishonest man.

It should be pointed out that one of the conditions attaching to this advance was to the effect that as it was recognized 'as due to, and dependent on, the existence of the abnormal conditions now prevailing, it is subject to review in the light of changes in the cost of living', the Controller having made arrangements with the Miners' Unions concerned for consultation with him in the event of circumstances arising which might create a case for such review.

In some districts, indeed in most of the coal-fields, the underlying principle for the determination of the amount of the rise and fall in wages was the selling price of coal, and nowhere was this principle more closely held than in Northumberland, where it was the practice to make quarterly ascertainments. The Conciliation Board of this field met in October, when the position disclosed was as shown below :

<i>Product and audit Average of all classes of coal at the pit's mouth</i>	<i>Price according to the audit</i>		<i>Increase (+) or decrease (—) of the last audit</i>	
	<i>Period covered by last audit</i>	<i>Average selling price per ton</i>	<i>Previous audit</i>	<i>A year ago</i>
		<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Northumberland .	1917 June—Aug.	15 9½	+ 0 7½	— 3 2¼

No change in the miners' wages took place as a result of the ascertainment, although—on account of the falling off in the export trade on which the Northumberland field chiefly relies—the fall in the average selling price of the coal warranted a

considerable reduction. During the summer the average realized prices in all exporting districts had been declining owing to the shortage of shipping tonnage, but the Controller directed the colliery owners not to apply for a consequential reduction of wages. He hoped that as a result of his recent directions as to prices the average would rise again and might even, in some cases, be higher than before. He considered, therefore (this was in September, at the time the miners' application was under consideration), that a guarantee of existing wages would not be unreasonable, and hoped in this connexion that it might be practicable to arrange that the periodical ascertainments of realized prices for the purpose of fixing wages would be suspended during control, and so remove a possible cause of unrest.

CHAPTER X

THE YEAR 1917 (*continued*)

The Finance Branch of the Control. — Its Organization and Work. — State of the Coal Trade at the close of the year.

THE work of the Financial Section of the Control was both extensive and of very great importance. In its earlier days it was under the guidance of a Committee of three eminent chartered accountants, viz. Sir Woodburn Kirby, Mr. Arthur Lowes Dickinson, and Mr. Gibson. The latter gentleman, after a few months, resigned owing to illness, and early in the year 1918 Sir Woodburn Kirby left to undertake the reorganization of the work at the Ministry of Pensions. Thereafter the branch was under the guidance of Mr. Arthur Lowes Dickinson,¹ assisted by Mr. Follet Holt, Mr. Runtz, and a staff of accountants.

The magnitude of the work with which this section of the Control had to deal will be realized when it is stated that every colliery was required to make monthly returns as to its financial position; no dividends could be paid or money borrowed by colliery companies unless with the sanction of the Controller. The profits standard of each undertaking had to be checked, and, working in conjunction with the Production Branch, in many cases substituted standards determined, and, also working in conjunction with the Production Branch, decisions made as to whether or not certain collieries or parts thereof should be closed.

The form of the monthly and quarterly returns to be made by the colliery owners of each individual undertaking, which was drawn up by the Finance Branch, is given in Appendix VIII, from which it will be seen that it covered and epitomized the whole of the operations of each concern, enabling the branch to follow, analyse, and check these. Some items taken from the agenda of one of the monthly meetings of the 'Board of Financial Control', as the Financial Advisers to the Controller were

¹ Now Sir Arthur Lowes Dickinson.

designated, will serve to show the extent and variety of the work of the Financial Branch.

Item. To consider the desirability of standardizing a form to be completed by the Accountants for the assistance of the Financial Advisers in dealing with applications for authority to distribute dividends or to repay loans.

Item. To consider the desirability of amending the forms of application for authority to distribute dividends or to repay loans so as to show :

(a) The calculations of the liability for Excess Profits Duty and Income Tax in respect of the period in which the profits which it is desired to distribute were earned, and

(b) Whether adequate provision for such liability has been made in the accounts.

Item. To consider the form of weekly Report of Progress.

Item. To consider the question of authorization of capital expenditure.

Item. To consider the procedure suggested in the case of a question arising as to the allocation of expenditure of Capital or Revenue.

Item. To consider the desirability of arranging that all accountancy investigations on behalf of the Controller be performed by the staff of the Finance Section under the guidance of the Financial Advisers.

Item. To report that the Conjoint Officer wishes to be informed of all cases of new work, costing £500 or over, revealed in a monthly report or other account as having been charged against revenue.

Item. To consider the desirability of modifying the monthly report (return) in such manner as to save Owners duplication of work in preparing information for this and other Departments of the Board of Trade.

These are some few of the items on an early agenda paper of the Finance Branch during the first year of control. It will be observed that one of them relates to a request from the ' Conjoint Officer '. This was an official from the Board of Inland Revenue who was attached to the Controller of Coal-mines Department to act in the capacity of a liaison officer between the two departments, the relation existing between the financial section of the Control and the Inland Revenue being very close, the work of the two, in certain directions, merging the one into the other, and obviously so, as a study of the financial clauses of the Coal Control Agreement (see pp. 95, 96, and 97) will make abundantly clear.

Allocation of Expenditure to Capital or Revenue

In view of the provision in Clause 16 of the Coal-mines Agreement that profits should be the amount of profits as determined in the Finance Act, it was necessary for the allocation of expenditure to capital or revenue to be determined in a manner satisfactory both to the Inland Revenue and the Coal Control Department. A procedure, therefore, was adopted which serves as an example of the close attention to detail which had to be practised and of the exactness of the methods adopted by this branch of the Control.

On an owner making an application for direction as to whether expenditure should be charged to capital or to revenue :

(a) He was informed that this was a question on which he must agree with the Inland Revenue.

(b) The Conjoint Officer (i.e. Conjoint as between the Coal Control and the Inland Revenue Department) was immediately informed.

(c) The Conjoint Officer then wrote to the Local Surveyor asking him to send up the income tax and excess profits duty pads, and instructing him not to agree to any method of dealing with the expenditure in question until further instructions reached him.

(d) The Conjoint Officer informed the Senior Accountant of the branch when he received the income tax and excess profits duty pads.

(e) The Senior Accountant discussed the matter with the Conjoint Officer, laying before him the information furnished by the Production and Distribution Branches.

(f) The Senior Accountant then laid before the Financial Adviser the relevant facts and the views of the Conjoint Officer in duplicate.

(1) As to the amount, if any, which should be allowed as a charge against revenue.

(2) As to the necessity of obtaining an engineer's report.

(3) As to any other information which the Conjoint Officer thought should be obtained.

(g) If the Financial Adviser concurred in the opinion of the

Conjoint Officer he initialled both papers, one for transmission to the Conjoint Officer and one for retention on the file, and returned them to the Accountant.

(h) The Conjoint Officer sent instructions to the Local Surveyor in cases in which the concurrence of the Financial Adviser had been signified to him, and in the event of disagreement the Financial Adviser discussed the matter with the Conjoint Officer.

(i) If the Conjoint Officer and the Financial Adviser were of opinion that a Mining Engineer's Report was desirable, the Financial Adviser sent a minute to the Production Branch intimating the fact.

(j) The engineer's report, when received, was forwarded to the Financial Adviser and considered by him and the head of the Production Branch before being discussed with the Conjoint Officer, the Financial Adviser then either taking up the discussion with the Conjoint Officer or giving instructions to the Accountant.

Price of Coal to Producers' own Works

As has been stated elsewhere in this work (see p. 96), the collieries in some instances constitute a part of a composite undertaking which may comprise coke ovens and iron works. It was necessary therefore, in such cases, to determine the method by which prices of coals should be arrived at, so that they might be charged on a commercial basis as between the collieries and other departments of the industrial concern, such as coke ovens, blast furnaces, &c., owned by the same firm. It was agreed between the coal-owners and the Controller as follows :

Prices were to be subject to any increase of the 4s. under the Price of Coal (Limitation) Act which might be sanctioned by the Controller of Coal-mines. No sales or deliveries for shipment for export were to be taken into account either during the basis period or the controlled period,¹ and the following methods were applicable to coals of the same description sold in similar quantities and under similar conditions :

¹ By 'basis period' was meant the period 1st July 1913 to 30th June 1914 as defined in the Price of Coal (Limitation) Act, 1915. By 'controlled period' was meant the period when works were controlled by the Munitions Department and collieries controlled by the Controller of Coal-mines.

(a) Where firms in the past had charged the coals to other departments of the undertaking at market prices, 4*s.* per ton to be added to the prices charged each month during the basis period, on the coals supplied during the accounting period.

(b) Where the colliery owner had not in the past charged the coals sold to his other works on a commercial basis, that is, at the same price which he was selling quantities of coal on the open market, the price for each month to be the price he obtained in the open market during the previous month. Where no sales had been made during the previous month, the price to be the mean between the last sale and the first sale afterwards.

(c) Where colliery owners were not selling a sufficient quantity of similar classes of coal to outsiders to give a reliable basis for the coals supplied to departments, the prices might be the prices obtainable at the nearest colliery vending similar classes of coal.

(d) Where the colliery owner might be selling reasonable quantities from other pits, but reserving the whole of the coal at one or more pits, as, for instance, where the collieries adjoin the other works, the price was to be based on the sales from the nearest other colliery; but if the colliery owner was also buying coals, regard was to be had to the price at which he was purchasing.

For example, if a colliery owner supplied $\frac{3}{4}$ of his requirements from his own colliery, and $\frac{1}{4}$ from outside:

The pit price of coal at the nearest colliery might be 14*s.*
Coal delivered, including dues, 15*s.* 6*d.*

	<i>s.</i>	<i>d.</i>
$\frac{3}{4}$ at 14 <i>s.</i>	10	6
$\frac{1}{4}$ at 15 <i>s.</i> 6 <i>d.</i>	3	10½
Price chargeable	14	4½

(e) Alternatively, where firms were buying large quantities of coals for their other departments, say their iron works, the price at the colliery might be based on the monthly price at which coals were purchased from outside parties.

(f) Where prices to be charged to works controlled by the Ministry of Munitions had been definitely approved by that Ministry, these were to remain in force unless the Controller of Coal-mines had reason to think they were not fair market values,

or there was an increase in the 4s. under the Price of Coal (Limitation) Act.

(g) Where it had been the practice to allow to employees coal free of charge or at a nominal price, the custom was to be continued to colliery employees; but where coals were supplied to works not subject to the Controller 4s. was to be added to the price charged during the basis period, subject to the proviso that should the quantity of coal supplied have increased the additional coal was to be charged at market price.

The State of Trade at the Close of the Year 1917

Prices of coal continued, of course, to be purely artificial during the year, and the level varied little as compared with that of the year previous. Thus, Northumberland best steam coals f.o.b. at the Tyne, which at the beginning of the year were quoted at from 29s. to 30s., were quoted from 6d. to 2s. 6d. higher at the close of the year, and the range of variation in respect of coals in other coal-fields was not greater. In regard to sea-borne coal, the difficulties of tonnage and high cost of freight showed little improvement. These difficulties were occasioned by the unprecedented demand for tonnage for the purposes of transport and maintenance of our armies abroad, loss of vessels by the submarine activity of the enemy and the longer duration of voyages due to the convoy system, and to congestion at the ports.

Writing on the subject of the coal trade of the year in question, that well-informed periodical, the *Colliery Guardian*, correctly summarized the condition of affairs in the coal-mining industry: 'On the whole,' it said, 'the past year has probably been one of the most strenuous and anxious times that colliery managers have ever been called upon to meet. The provision of home coal was by no means the chief difficulty. The enormous growth of munition works requirements has led to an abnormal demand for steam units, and the rapid extension of by-product coking plants has absorbed enormous quantities of coking slacks, which have in many cases been obliged to be procured from unaccustomed sources, throwing still greater strain upon an already overburdened transport.'¹

¹ *Colliery Guardian*, 11th July 1918, p. 26.

The quantity of coal exported necessarily suffered greatly from the restrictions which had to be imposed thereon, especially in respect of neutral markets. Certain coal-fields, too, were precluded entirely from sending their coal for export to accustomed ports, e.g. Derbyshire and Nottinghamshire were excluded from Hull, and in consequence an additional demand was made upon South Yorkshire.

The quantity of coal, coke, and manufactured fuel exported during the year, and the average value as compared with the previous year, were as follows :

1916	.	.	41,157,746 tons at 24s. 7·4d. per ton.
1917	.	.	37,800,705 tons at 27s. 2·3d. ,, ,,

On the 28th of June the Controller put into operation his scheme for grading prices in accordance with the quality of coal and market destination, before which date all coals exported to France and Italy were sold at a flat rate of 30s. for large and 20s. for small coal. And when the Local Committees¹ had properly classified the various grades of coal, he issued on the 12th of October an amended order fixing new prices for exported coal.

¹ Namely, the district committees of coal-owners, acting under the Central Coal and Coke Distribution Committee mentioned in Chapter III.

CHAPTER XI

VARIOUS COMMITTEES OUTSIDE THE CONTROL

Report of the Committee to consider the position of the Coal Trade after the War. — The Conservation of Coal. — The Work and Report of the Coal Conservation Committee. — Economy in the use of and Scientific Research in connexion with the Utilization of Coal a matter of National Necessity. — The Land Acquisition Committee. — Tribunal proposed for dealing with the question of Royalties and Wayleaves.

IN the preceding chapters we have been concerned with the consideration of the administration of the coal-mining industry during the War. Let us leave that part of our narrative for a while and turn our attention to the conclusions arrived at by the three highly important Committees which had been set up during the War to study certain other aspects of the great coal question.

The Coal Trade after the War

A Departmental Committee of the Board of Trade, under the Chairmanship of the late Lord Rhondda, was appointed as far back as June 1916 to 'consider the position of the coal trade after the War, with especial reference to international competition, and to report what measures, if any, are necessary or desirable to safeguard that position'. On becoming President of the Local Government Board later in the year 1916, Lord Rhondda resigned the Chairmanship, being succeeded by Mr. Adam Nimmo.¹ The Committee, which was composed of highly qualified business men, issued a unanimous report in June 1918.

The following summary of recommendations is given in the report :

1. That the policy of the country be directed towards maintaining and, if possible, increasing the export coal trade.
2. That all restrictions on the free export of coal imposed during the War, including the present system of export under

¹ Now Sir Adam Nimmo, K.B.E.

licence, should be removed as soon as possible after the termination of hostilities.

3. That in order to promote the interests of foreign trade, not only in coal but in other commodities, shipping in enemy hands should be made available for the immediate use of this country and her Allies at the close of hostilities.

4. That on the termination of hostilities all men who, prior to the War, were employed in colliery work should be released from military duties at the earliest possible moment, and that every effort should be made by coal-owners to reinstate these men as rapidly as it is practicable to do.

5. That the attention of coal-owners be directed to the desirability of introducing, wherever practicable, the most up-to-date appliances for increasing the output per person employed.

6. That the miners in every coal-field should be encouraged to raise the individual production of coal; that any restrictions in operation affecting output should be withdrawn, and that arrangements should be made to ensure to the workmen the full reward of increased effort.

7. That a statutory tribunal be set up having powers—(1) to enforce the granting of wayleaves, both underground and surface, where unreasonably withheld, and to determine the conditions upon which they shall be granted; (2) to consider applications for, and, if so advised, to enforce, the granting of facilities to mineral workers or lessees for the erection on land adjoining collieries of coke ovens, by-product plants, chemical works, and workmen's houses, and for the treatment in such plants and works of coals raised at such collieries or elsewhere, and to fix the conditions (including compensation and tenure) upon which such facilities be granted.

8. That the law relating to surface support be remedied so as to secure that there may be as little loss of coal as possible in connexion with the support of land, buildings, public works, railways, canals, &c.

9. That coal-owners, exporters, and shippers interested in special markets should co-operate to prevent these markets from passing out of British control, and to secure satisfactory discharging, landing, and transport facilities for British coal in foreign countries, where these are inadequate.

10. That an investigation should be made into the character of the plant in operation and the facilities afforded at all home ports used for the shipment of coal with a view to bringing them up to the highest level of capacity and efficiency.

11. That statistics of the trade in British coal, and coal in competition therewith in foreign markets, should be obtained month by month by those interested in the export coal trade, along with any information available showing the trend of British trade in coal in such markets, and suggestions as to how this trade may be developed.

The Coal Conservation Committee

About the year 1909 the late President Roosevelt brought forward the subject of an international conference on the resources of the world, one of the most important of the resources being coal ; and the late Sir William Ramsay, in his Presidential Address delivered before the British Association at Portsmouth in the autumn of 1911 followed by a letter to *The Times* on the 1st of November of the same year, directed attention to the paramount importance of our great national asset—coal, and, as Jevons had done years before in his remarkable work on the subject, sounded a note of warning as to its rapid rate of exhaustion, wasteful methods of extraction, and prodigality in its utilization. Sir William Ramsay stated that it was ‘exceedingly unlikely that any other source of heat and power will be discovered which will supplant coal’, and that it was therefore incumbent on us to take every means in our power to prevent waste in the getting and using of it.

The matter was made the subject of a question in Parliament, and the writer, in a minute to the Home Secretary (10th November 1911), recommended as worthy of consideration the appointment of a Standing Committee of Experts to deal with the subject. The suggestion was favourably entertained, but matters of more pressing importance (e.g. the putting into effect of the new Coal-mines Act, the national strike of miners in 1912, the outbreak of war in 1914) led to delay in putting the proposal into execution, and it was not until June 1916 that the Prime Minister (then Mr. Asquith), acting on the advice of the then Home Secretary,

Mr. Herbert Samuel (now Sir Herbert Samuel, G.B.E.), appointed a Committee, as a sub-committee of the Reconstruction Committee, of which the Prime Minister was Chairman, to report on the matter.

The Coal Conservation Committee was under the Chairmanship of Lord Haldane, who not only had been Minister of War under the Asquith administration, but had, at a later period, held the office of Lord Chancellor. The Committee comprised experts in mining, geology, electrical engineering, iron production, the chemistry of fuel, gas works and railway management, and contained one representative of Labour in the person of Mr. R. Smillie, the President of the Miners' Federation of Great Britain.

The Committee were asked to consider and advise as to :

- (1) What improvements can be effected in the present methods of mining with a view to prevent loss of coal in working and to minimize cost of production.
- (2) What improvement can be effected in the present methods of using coal for the production of power, light and heat, and of recovering by-products, with a view to ensure the greatest possible economy in production and the most advantageous use of the coal substance.
- (3) Whether, with a view to maintaining our industrial and commercial position, it is desirable that any steps be taken in the near future, and if so what steps, to secure the development of new coal-fields already being worked.

On the establishment of the Ministry of Reconstruction the Committee became a Committee of that Department.

The Committee divided itself into five sub-committees, viz. : (1) mining, (2) generation and transmission of power, (3) metallurgical, (4) carbonization, and (5) geological. Additional members were co-opted to three of these sub-committees. The writer was a member of the Coal Conservation Committee and of all the sub-committees, and acted as assistant to Lord Haldane. The Secretary of the Committee was Mr. Arnold D. McNair, assisted by Mr. R. W. Stanners.

(a) *Fuel Research.* It was clear from the first that there were

many questions within the scope of the Committee's inquiry which could not be decided on the basis of existing knowledge, but necessarily involving research, which no transitory body such as a Committee, with no permanent staff or other resources for the purpose, could undertake. The Advisory Council for Scientific and Industrial Research¹ was approached, and as the result of negotiations there was established by the Government the Fuel Research Board under a Director (Sir George Beilby, F.R.S.), the other members of the Board being the Hon. Sir Charles Parsons, K.C.B., F.R.S., the distinguished engineer of turbine fame, Sir Richard Threlfall, K.B.E., F.R.S., the well-known chemical engineer, both of whom were members of the Advisory Council for Scientific and Industrial Research, and the writer (who also was Mining Assessor to the Advisory Council). The Fuel Research Board has erected a finely equipped—perhaps the best in the world—fuel research station at East Greenwich, close to the site of the South Metropolitan Gas Works,² and has undertaken and published the results of a highly important character, e.g. work relating to low temperature carbonization of coal, use of pulverized coal, domestic heating, utilization of peat, gas standards, fuel alcohol, steaming in vertical and gas retorts, and is engaged upon a chemical survey of the coal-fields of the United Kingdom.

The various sub-committees of the Coal Conservation Committee reported at different times, but the complete report of the Committee was submitted to the Government on the 23rd January 1918.

(b) *Geological Requirements.* The results of the labours of the Committee were of great interest and of a far-reaching character. In regard to geological matters (the first of the sectional reports to be forthcoming) they did not consider that any assistance from the State was called for in the matter of further developing the coal resources of the country, but that private enterprise had proved adequate to the task of exploration, and that development was proceeding in due course. They considered that a fuller knowledge of the mineral resources of the country, especially in

¹ Now a self-contained Department under the Privy Council.

² See Report of the Fuel Research Board for the period 1918-19.

the case of coal, 'has so important a bearing upon the future industrial development as to make it desirable that powers to put down bore-holes should be conferred on some Department of the State'. They were of the opinion also that the completion of the primary six-inch survey of all coal-fields 'and areas into which their concealed parts may extend' was desirable, and that a decennial revision of the six-inch geological maps of all areas where coal-mining is in progress should be enforced. Free access should be permitted to the Geological Survey to bore-holes, shafts, &c., whilst in progress, and records of the strata passed through be preserved by the Geological Survey. These extensions in the powers of the Geological Survey were, the Committee considered, matters calling for early attention.

(c) *A Ministry of Mines proposed.* The points of importance arising for the deliberation of the Mining Sub-Committee were many. They considered that a Ministry of Mines should be set up, concentrating under one minister the functions of a mining character at present performed by the Home Office, Board of Trade, Board of Education, and such functions performed by the Controller as might be continued after the War, and recommended that such a ministry should have statutory power conferred upon it to take all necessary steps for the conservation of coal, and should be charged with the duty of providing the necessary local and special machinery for preventing waste in working 'so as to ensure that, as far as economically practicable, all coal shall be worked which, if left unworked at the time of working the adjoining coal, is likely to be permanently lost'. It suggested the appointment of District Committees, by the Ministry of Mines, of practical men to investigate and report on questions referred to them.

(d) *Cost of Production.* The question of the cost of production was gone into. It was realized that the cost of production after the War would depend to a large extent upon the wages ruling, but that the cost of materials might be expected to be relatively high for some years, and that consequently it appeared reasonable 'to assume that the cost of producing coal will be higher than it has been in the past, even after the abnormal conditions due to the War have passed away'; and, they added, 'there is the

greater necessity for every means being devised and used which is likely to lead to a reduction of cost, if the home industries are to be provided with coal at a price at which their position can be maintained, and if our foreign markets are to be preserved'. A statement which events have since shown to be perfectly sound. The output per person employed has always been a vexed question, constituting, as it does, one of the most important factors in the cost of production. Comparisons are frequently instituted between the output per person in the mines of the United Kingdom and that of the mines of the United States of America and of Germany, to the disadvantage of the United Kingdom. This form of comparison was indulged in as late as 1919 before the Coal Industry Commission. The higher production per individual employed in the coal-mines of the United States was then attributed to the greater advantage obtained by the wider introduction of mechanical coal-cutters as compared with Great Britain, and our backwardness in this respect was pointed to. But a comparison is only of value, and sound deductions can only be made therefrom, when like is compared with like. The geological conditions obtaining at the mines in the respective countries named are quite different, and in instituting comparisons this fact has to be borne in mind. In the United Kingdom the coal-mines have been worked for a much longer period than those of the other countries mentioned, and in the United Kingdom the more easily worked and the thicker seams are in a much more advanced stage of exhaustion; moreover, the coal-mines of the United States of America are peculiarly suited to the application of mechanical coal-cutters. In the greater part of one large field of the United Kingdom—South Wales—they cannot be applied owing to the peculiar structure of the coal and character of the roof.

Over the quinquennium 1906–10 the yearly output per person employed underground averaged 340 tons. In 1906 it was 360 tons, and in 1913 321 tons, or a fall of nearly 11 per cent. between these two years. But again, seeing the output per person is arrived at by dividing the annual output by the number of persons employed, the statistical value of the figure is open to criticism. In order to obtain a correct comparison between one year and another, each year should have the same number of working days, and the

number of persons should not vary over the year. In other words, the only way of arriving at a correct result is by dividing the total number of shifts worked per annum into the total output, but the information as to the number of shifts worked in any year is not available. There is no doubt, however, that the output per person employed had been on the down grade over a period of years, and that this cannot be entirely accounted for by the gradual exhaustion of the more easily got seams, the increasing depth of the mines, and the greater distance of the face from the shafts, nor to the advent of the eight-hour system. The recent weeks ¹ have witnessed a considerable increase in the productive effort of the coal-miners of the United Kingdom.

(e) *Recovery of Coal from Refuse.* The Committee was able, by an elaborate system of returns, to arrive at a close estimate of the amount of refuse or dirt taken from the coal at the pit bank, the year 1913 being taken for the purpose. The total output as represented by the returns, with regard to which a record of waste had been kept, was 271,030,844 tons (the total output of coal for the United Kingdom, it will be remembered, was 287,411,869 tons); the amount of refuse—and by refuse is meant dirt (shale or stones), coal adhering to the dirt, bad coal, and pyrites—taken from the coal at the pit bank was 8,046,935 tons, or 2·9 per cent. From this refuse 381,598 tons of coal were recovered, or 4·7 per cent. The Committee came to the conclusion that ‘an analysis of the returns appears to indicate that more attention might with advantage be given by collieries to this matter’.

For the first time in the history of the coal-mining industry the quantity of coal consumed as boiler fuel at the collieries was determined, it being 6·8 per cent. of the output, the district showing the lowest consumption being the northern coal-field, with 5 per cent., which was undoubtedly due to the economical use of coal in the production of the electrical energy so largely supplied to the northern collieries by the Newcastle Electric Supply Co., for the equivalent in coal for the heat supplied from coke ovens, blast furnaces, and outside sources generally was taken into consideration in making the returns.

¹ This was written in September 1921.

The total quantity of small coal left underground in the coal-mines of the United Kingdom is much smaller than the general public and even than many mining men had supposed to be the case. This quantity would appear to be, approximately, 2,325,000 tons on a 1913 basis. During the greater part of the war period, probably less was left below ground, owing to the high prices ruling in regard to export coal. No coal would be left below ground if it was profitable to sell it, and it is the business of scientific research to make its use profitable.

(f) *Barriers*. Of late years a great deal of discussion has raged round the question of the loss of coal left in barriers. An endeavour was made by the Committee to ascertain the extent of the loss. The Royal Commission on Coal Supplies (1903-5) deducted about 9,500 million tons from the estimate of the total available resources of coal, at a depth not exceeding 4,000 feet, as the amount that would be lost on account of barriers required to be left and for *the support of surface buildings*. They did not divide the amount between the two causes of loss. The Coal Conservation Committee however did so, putting the loss due to barriers at between 3,500 and 4,000 million tons, and stated that 'It is evident that it would not be possible, without running considerable risk, to work out a large proportion of the coal estimated to be left in barriers', but concluded that the quantity involved is so large 'that even if a small percentage of it could be worked the quantity of coal saved would be considerable'.

(g) *Strikes*. The Sub-Committee concluded their report with these words :

'Strikes and lock-outs undoubtedly affect the cost of production injuriously. The question of their prevention is a large one, extending beyond the industry ; but the Committee earnestly recommend not only that the machinery of conciliation should be set up, which will permit of a complete and impartial investigation of the facts, but that every effort should be made to secure a settlement by negotiation before any breaking off of the relations between employers and workmen takes place.'

Coal and Electric Power. Perhaps the most remarkable and far-reaching results of the Coal Conservation Committee were those arrived at by the Sub-Committee on the Generation and Transmission of Energy. Their recommendations, if and when carried

into effect—for they have not so far been acted upon except to set up Electricity Commissioners—would revolutionize our industrial life. It was proposed that ‘super-power’ stations should be established in suitable localities, the guiding factors in the selection of the sites being an ample supply of water, cheap fuel, and centrality as regards areas of industrial activity. They estimated that 80 million tons of coal were annually consumed in the United Kingdom in the production of energy, and stated that by a national scheme of electrification devised and carried out in accordance with the best modern practice, the same amount of energy could be produced with 25 million tons, which would represent a saving of £27,000,000 per annum—reckoning small coal as worth about 10s. per ton. Seeing also that the coal used in the generation of the electrical energy would be utilized in accordance with the best known methods of by-product recovery processes, instead of being, as is at present so largely the case, consumed in open grates, it was estimated that the total annual saving effected would amount to £100,000,000. Imagine the bearing of this fact in regard to meeting the interest on our war debts; imagine also the effect that the liberation of 55 million tons of coal for export and the increased export of by-products resulting from the more economic use of coal would have on our rate of exchange.

Nor is this forecast chimerical. We have the results obtained by the Newcastle Electric Supply Company to go upon. The north-east coast which is served by that power company is in point of area greater than that of Lancashire, the population is less than that of Lancashire, and consequently the area less advantageously placed in point of cheapness of supply. Yet by means of a group of power stations on the Tyne the whole district is served from one interconnected electrical system, and whereas in the case of Lancashire, with its many separate electrical undertakings, the price per unit of electrical power varied from 1*d.* to 2*d.* or more, the average price paid on the north-east coast was less than $\frac{1}{2}$ *d.* per unit and the use of electric power per head three times as great. Many of the collieries and all the shipyards on Tyneside use electricity to the exclusion of other forms of power, one result being a marked improvement in the atmospheric conditions.

The Question of Royalties

In Great Britain the coal is commonly owned by parties other than the colliery owners, i.e. private persons or corporations (e.g. the Ecclesiastical Commissioners), who usually are owners of the surface as well as of the minerals, and who lease the coal to the colliery companies for a period of years at a tonnage rent or by acreage, the rent payable being known as the 'royalty'; the right to carry coal over or through another mineral owner's property is termed 'wayleave'. 'The average of the royalties, inclusive of wayleaves, payable per ton of coal raised over the United Kingdom, and by whatever system payable, amounted in the year 1889, as estimated by the Royal Commission appointed to inquire into the subject of mining royalties, to 5.4*d.* per ton of coal worked, and as the wayleaves may be taken as averaging about $\frac{1}{4}$ *d.* per ton, the actual royalty rent would be 5 $\frac{1}{4}$ *d.* per ton.'¹ In the majority of cases little or no difficulties arise in the reasonable application made by colliery owners to the royalty owners in respect of obtaining leases on fair terms, and as to wayleaves and removal of barriers, but unfortunately perverse, avaricious, and obdurate landlords do exist, and their actions, if opposed to the national welfare, are not to be tolerated.

Amongst other matters referred to the Acquisition and Valuation of Land Committee, which was appointed by the Prime Minister in July 1917, under the Chairmanship of Mr. Leslie Scott, K.C., M.P.,² were the following :

1. Whether, and if so to what extent, the general principles appropriate to the acquisition and valuation of land for public purposes should be applicable to the special case of mines and minerals.

2. What action is desirable to meet the difficulty of obtaining on reasonable terms :

- (a) Wayleaves, both above and below ground,
- (b) Surface rights,

when such wayleaves or surface rights are required for the erection

¹ *The Ownership and Valuation of Mineral Property in the United Kingdom*, by Sir R. A. S. Redmayne, K.C.B., and Gilbert Stone, p. 72.

² Now Sir Leslie Scott, M.P.

or extension of plant or premises in connexion with the development of the nation's mineral resources.

3. Generally, whether any, and if so what, action is desirable to limit or extinguish the loss to the nation occasioned by leaving valuable products in mines for the purpose of supporting the surface, or as barriers, or by being landlocked, or by restrictive covenants, or otherwise.

4. What changes are advisable in the law in connexion with questions of support.

The Committee dealt with the mining portion of the terms of reference in their third report issued on the 18th March 1919. They summarized the causes of loss under fourteen heads and advised the creation of a Sanctioning Authority—such as they had recommended in their earlier report for other purposes—to which authority the problems affecting the mining industry in respect of the above terms of reference (for the solution of which compulsory orders might be required) should be referred and decided on broad lines of economic policy after full consideration of the various interests affected, and by whom compulsory orders should only be granted if they were clearly in the national interest. Such Sanctioning Authority was to be composed of Members of both Houses of Parliament, ‘with the addition of outside members of experience in various spheres of national life’, and to have power to call in expert advisers as witnesses on special questions. The advantage of this procedure, it was considered, would be to prevent the development of any fixed executive policy, as would the fact that the actions of the authority would be under the control of Parliament, there being power to appeal to Parliament whenever a question of policy was involved. The authority was to be a panel from which selected commissioners would deal with each case on its merits as does a Parliamentary Committee. They would not be a department ‘which might develop a stereotyped policy’. They considered that the Sanctioning Authority should be the only authority having power to make orders for the compulsory acquisition or working of minerals, or rights in, over, or under land, affecting the working of minerals.

They recommended further that a Mining Department should be created as a branch of the Home Office, which should have

‘ initiative, advisory, and executive powers ’, and which should entertain and examine applications for leasing or working minerals, the working of which can be shown to be in the national interest, and should make recommendations as they thought fit. Attached to the proposed Mines Department there should be an Advisory Council consisting of ‘ men eminent in branches of science connected with the mining industry, and representatives of owners, workers, and all other interests in the industry ’, with distinct sub-committees similarly constituted.

The proposal in respect of the creation of the Sanctioning Authority is an attractive one and presents many admirable features, and, in the event of the non-purchase of the coal lands by Government, would appear the most satisfactory, though a somewhat slow and cumbrous, method of meeting the case. The Committee included the able and well-known mining engineers, Mr. W. Forster Brown and the late Mr. C. E. Rhodes, as well as the well-known mining lawyer, Sir T. Ratcliffe Ellis, and the representative of the coal-owners, Sir Adam Nimmo, K.B.E.

CHAPTER XII

THE YEAR 1918

Official Visit to the Coal-fields. — Housing of Miners. — Labour Matters. — The Southport Conference of Miners. — Slackness of Trade. — Unemployment. — Mobility Bureaux. — Dirty Coal. — Surplus of Small Coal. — Absenteeism. — Effect of the Influenza Epidemic on the Production of Coal. — Change in the Condition of Trade. — Coal Shortage. — Output Propaganda. — Supply of Coal to France. — Author's Second Visit to France. — Recruitment of Miners.

Official Visit to the Coalfields—The Housing of Miners

THE President of the Board of Trade had for some time been desirous of making himself by personal visit and inspection more closely acquainted with the conditions, social and industrial, prevailing in the coal-mining districts, and, after consulting the Controller and the author, decided upon a somewhat extensive trip to some of the principal fields.

In February 1918, therefore, accompanied by the Controller, the present writer, and Mr. (now Sir) A. Lowes Dickinson (the Financial Adviser to the Controller), the tour was commenced. South Wales was visited, as well as Lancashire, Yorkshire, and Lanarkshire, and colliery arrangements and conditions generally studied on the spot, particular attention being devoted to housing conditions, in respect of which considerable difference exists not only as between different coal-fields, but as between different areas within a given field. Some of the colliery houses inspected were lamentable in the extreme, not only as to lack of space—a number of houses inspected had one room only—but in respect of sanitary arrangements. It seems to the writer most difficult for a family raised in such an environment to develop into healthy, moral, self-respecting, and (more or less) contented citizens; but it speaks volumes for the character of the people (the writer has in mind at the moment a certain Scottish mining village) that as a matter of fact such has in great measure been the case—not perhaps contented, but healthy, moral, and self-respecting. An incident is photographed on the mind of the writer. In visiting one of the

homes in question we saw the miner's wife, the sole occupant of the one-roomed house on the occasion of our visit, her men-folk being at work, absorbed in the perusal of the Bible. She was, she informed us, reading the Book of Daniel with a view to seeing 'how the war would end'! The house was tidy and as clean as a new pin, though cracked by subsidence, and furnished with one outdoor earth closet which it had *in common* with several other houses! It must, in all fairness, be remarked that the village in question was a very old one, and is not, by any means, representative of the average mining village of Scotland or elsewhere. But should such conditions be permissible, even if rare? The newer cottages were, in every case inspected by us, such as one would like to see provided for the manual workers, being roomy and ample, fitted with good kitchen and washing facilities and excellent sanitary arrangements. Not infrequently, also, the artistic side had been studied. Some of the older villages, though rarely, meet what one would naturally regard as the requirements of the case. Many of the coal-owners have the better housing of their employees very much at heart. And the housing conditions, to quote two examples, prevailing at two of the villages inspected by us, as well as the dining arrangements and baths provided for the workmen by their employers, were models of what should be. Not only should such conditions be more widespread; but regarded apart from ethics, it *pays* the employer to provide improved housing and bathing facilities, for such conditions draw to the colliery so provided the best class of workers, thus ensuring more regular attendance at work, an increased output per man per annum, and a decreased cost per ton. The writer makes this affirmation not only from his own experience but from that of others who have carried out the improvements advocated.

Labour Questions—Wages

The comparative position in respect of earnings in the different coal-mining districts as at the end of March 1918 was estimated to be as shown in the accompanying table (see p. 182).

Early in June a special conference of the representatives of the 'Federated' (see p. 56) mining area met in London to con-

sider proposals for the re-establishment of the wage agreement for a further period of years. Suggestions were formulated and submitted by the Executive, but as the South Wales Federation had a proposition for the Annual Conference of the Miners' Federation, 'That the machinery for dealing with the general wage rate be centralized in the National Federation', which, if carried, would mean the abolition of the Conciliation Board of the Federated Area and the formation of a National Board, it was decided to adjourn the consideration of the draft proposals put forward on the occasion named until after the decision of the annual conference mentioned. This was the starting-point of momentous events in the coal-mining world of Great Britain.

At the conference of the Miners' Federation held on the day following the conference of the representatives of the Federated Area, proposals were considered from the districts for advances in wage rates ranging from 25 to 100 per cent. The Executive recommended that the advance sought should be on a flat rate basis, it being urged that as 'such increase was intended to meet the increased cost of living, the lower paid grades of workmen working below ground and on the surface stood in equal or greater need of the advance than the coal hewers and other higher paid workmen.' It was decided to ask for 1*s.* 6*d.* per day for all men and boys of 16 years and over, and 9*d.* per day advance for boys under 16; that is, the same as the last granted war wage. The Executive arranged to meet the Controller on the subject. The application was conceded by the Government as from the 30th June 1918.

It was estimated at the time that the amount of this concession added about £22,000,000 to the annual wage bill of the coal-mining industry on the basis of the number of persons employed in 1917, when the previous war wage was granted (in September 1917). The price of coal was at once increased by 2*s.* 6*d.* per ton. In July an Order was made providing for an increase of 1*s.* 6*d.* per ton in the price of all coal dispatched from collieries for consumption in the United Kingdom, commencing on the 8th of July, to meet the cost of the increased war wage. The prices of coal for shipment for export and for bunkers were increased by 2*s.* per ton in the case of all vessels the loading of

COMPARATIVE STATEMENT OF ESTIMATED EARNINGS PER PERSON EMPLOYED, CLASSIFIED ACCORDING TO NATURE OF WORK, AS IN QUARTER ENDED MARCH 1918, WITH ADDITION FOR SECOND WAR WAGE

	Scotland	Northumb- erland	Durham	Cumber- land	Yorks., Derby, & Notts.	Lancs.	South Wales & Mon- mouth.	Leicester	Staffs.	Somerset and Warwick.	All dis- tricts
	£	£	£	£	£	£	£	£	£	£	£
1. Coal getters	222	202	181		206	186	213	211	219	206	204
2. Putters	165	159	145	215	165	137	179	148	165	142	159
3. Stonemen	214	215	181		226	198	180	200	206	178	201
4. Deputies	226	227	214	240	244	235	227	220	268	225	230
5. Haulage hands :											
Men	149	160	130	200	125	146	127	123	136	174	135
Boys	84	80	71	105	70	84	78	69		107	77
6. Other underground	161	131	132	169	116	155	138	135	166	160	136
7. Engine men	222	246	216	229	236	212	170	205	223	265	214
8. Pit-head men	184	179	162	102	148	171	194	136	152	150	166
9. Screeners :											
Men	149	126	117	157	123	142	152	112	137	145	133
Boys	82	59	57	76	51	76	57	57	66	60	61
10. Stokers	182	175	191	176	184	171	161	162	193	224	177
11. Tradesmen	172	170	156	167	167	180	165	152	183	175	166
12. Other surface	158	132	125	161	152	124	158	119	149	152	144
Average for all employees	191	164	154	182	169	164	190	157	170	163	171

which was begun on or after the 8th of July, the 2s. being made up of 1s. 6d. to meet the cost of the war wage, and 6d. to meet the increased dock charges.

The Coal Control Department assumed responsibility for the payment of the war wage as from the 30th of June, and in order to provide funds for so doing arranged to be credited by the collieries with 4s. per ton on all coal disposed of on and after that date, so that it was ensured that the whole of the increases in prices to meet the cost of the war wage should be specifically applied to that purpose.

The Conference of the Miners' Federation of Great Britain at Southport in the summer of 1918 decided upon a programme which included :

- (a) A National Wages Board in substitution of District Wages Boards (see p. 7).
- (b) A five days' working week.
- (c) A six-hour working day.
- (d) Alliance with the railwaymen and transport workers in order to enforce their demands.

Towards the close of July there was held a meeting of the Coal Conciliation Board of the Federated Area, at which the Chairman of the Workmen's Section of the Board (Mr. Stephen Walsh, M.P.) intimated to the coal-owners that, as under the decision of the Southport Conference all general wage questions had in future to be settled by a National Wages Board, the workmen's representatives were unable to continue the negotiations for the renewal of the wage agreement for a further period of years. The Chairman having expressed regret at the outcome of the matter and detailed the many difficulties which stood in the way of a National Board owing to differences of conditions existing between the several fields, the coal-owners submitted proposals for a Joint Board on the lines of the Whitley Report (see p. 208), which the men considered.

As the writer has said elsewhere : ¹

‘ Before the period of Government control, wages were dealt with by

¹ ‘ Review of Coal-mining during the Year 1920’, *The Times Engineering Supplement*, January 1921.

District Boards, but certain of the miners' leaders had for some time been urging national settlement of wages in preference to district settlement. The arguments advanced against National Settlement are difference of conditions in respect of the occurrence of the coal, working practice, division of labour and systems of payment, and also the variations that exist in respect of the relative profit-earning capacity of different districts and differences in regard to trade conditions generally. To some extent some of these differences exist within the area of a given coal-field; the matter is one of degree rather than of principle, but there is no doubt that settlement on national lines, if persisted in, will be a serious matter for the less profitable coal-fields, a disability which the Collier will share with the Coal-owner.'

In August a movement was set on foot for the agitation towards securing what had long been advocated by some of the miners' leaders, viz. the Nationalization of Mines. At the meeting of the annual conference of the Scottish Mine-workers, a prominent leader of the miners, Mr. J. Robertson, moved a resolution, which was unanimously carried, 'reaffirming the opinion that the Government should at once take over all coal and other mines, work them as a national enterprise, and appropriate to the nation all rents and wayleaves; and that due arrangements should be made for the participation in the management, both local and central, of employees of all grades; that the Government Coal Department should undertake the supply for export and shipping, the local authorities, and all industrial consumers of any magnitude, delivering coal for domestic consumption to any railway station at a uniform fixed price'.

Towards the close of August, the delegates of the Miners' Federation met in Southport again, when it was decided that the Coal Conciliation Board of the Federated Area should be continued for the duration of the War and for six months afterwards, and that the coal-owners be informed accordingly. In November both parties agreed as to the desirability of its continuance.

Mobility Bureaux

In the early months of this year the coal situation in point of supply was easy, and there was actual unemployment at some of the mines in the exporting districts, i.e. South Wales, Northumberland, Fife, and, in a lesser degree, Durham. There were early

in February no less than 3 million tons of small coal accumulated in stock, more than 2 million tons of which were in South Wales alone. This was due to the fact that the export trade was much hampered. The situation became so serious that in February we were face to face with the possibility of thousands of miners being thrown out of work. In some parts collieries were being carried on at a loss in order that work might be found for the men. This was especially the case in the 'dry' steam-coal area of South Wales; yet some thousands of miners were required in Yorkshire, the coal from which area was in great demand; 5,000 additional men could have been immediately placed there for the production of coking coal alone. Meantime the scheme of mobility bureaux for meeting the situation was welcomed with enthusiasm by the Miners' Federation, and if the scheme accomplished one quarter of what was hoped from it the pressure would be greatly relieved. The most difficult factor in the scheme was that of housing. We had to deal with men to be transferred from coal to coal, quite a different question to the transference of men from coal to, say, shipbuilding, &c. This was a matter for the Ministry of National Service to settle. Hitches occurred between the Miners' Federation and the Ministry of National Service in respect of such questions as allowances, &c., and by the time that the arrangements were ready the situation had undergone considerable change; the export trade had improved, more ships being available mainly owing to the carrying into effect of the shipping programme. Not only, too, had the demand for British coal in France greatly increased owing to the German advance and the requirements of the American Expeditionary Army, but the fuel budget of the Ministry of Munitions was largely augmented. However, the Production Branch of the Control did effect some large transference of men, chiefly within a given district and mostly in South Wales, but one or two inter-district transfers were also carried out.

Should Britain ever be faced with a great national emergency such as the recent Great War, one of the first problems in connexion with the coal industry which she should solve and put into the shape of an effective working scheme, should be a mobility scheme for the transference of miners from district to district to

meet the varying phases of the trade due to the changing circumstances and conditions of demand in respect of different classes of coal; and it would be better if such a scheme were to be formulated in its entirety by those in the coal-mining industry who are fully acquainted with the details of the industry and understand the psychology of the miners in the different districts, than be undertaken by a Government Department.

Small Coal

At the commencement of the year an inter-sectional Committee, under the chairmanship of the present writer, was formed to go into the question of the utilization of the accumulated small coal. The possibility was considered of an intensification of briquetting and the purchase by Government of briquettes at an agreed price and stocking them against a dearth of fuel for use in railways or for export. This would, as matters turned out, have proved a sound policy. Again, we considered the possibility of the manufacture of nitrates from the atmosphere by nitrogen fixation process, but, as has been stated, the demand for coal not only improved but the country was again threatened with a positive shortness of coal.

Dirty Coal

When the slackness in the coal trade manifested itself in the early part of the year, the outcry against the dirty state of the coal became marked, and indeed there was cause for it, for the admixture of shale and stone had certainly been on the increase. The writer has estimated that on the average the percentage of dirt (shale and stone) in coal produced in the United Kingdom had fully doubled during the War. This estimate is based on figures forthcoming from a variety of sources. The contention of the French authorities in respect of the coal supplied to that country was, therefore, quite correct. It is a peculiarity of the coal trade that in times of low prices and limited demand, when there is great competition for orders, the coal put upon the market is cleaner, i. e. free from dirt, and the class of coal generally better than it is when the demand is brisk and prices high. The

reason for this is obvious. The inferior qualities will not sell under the first-named conditions. It would be interesting to know what would be the character of the coal supplied under a system of nationalization of the coal-mines ! Probably similar to that supplied during the period of Control.

The Controller of Coal-mines was fully alive to the significance of the increased percentage of separable dirt in coal, and was sparing no effort to bring about its decrease. The importance of the matter had been impressed both on miners and the management of collieries by letter, and, in some cases, by addressing mass meetings. An officer of special experience was appointed to make investigations at collieries with regard to specific complaints, and to consult with both management and workmen regarding the steps to be taken to remedy the trouble.

The presence of separable dirt is due to careless filling of coal below ground by the miners, and to imperfect picking and cleaning on the surface. The drafting into the mines of a less expert class of miner, due to the withdrawal by recruitment of many of the more experienced miners, the scarcity of labour, and possibly, to some extent, shortness in the supply of machinery necessary for cleaning the coal, conduced to the increase in the admixture of the dirt, but the chief reason was undoubtedly the fact of the great demand for coal.

Figures were taken out which showed that the percentage of dirt contained in the coal supplied to gas works had increased by between 5 and 6 per cent. of the coal contents as compared with 1916, and in the coal used in works generating electricity from 8 to 9 per cent. in 1916 to between 15 and 18 per cent. towards the close of 1917 and early in 1918, the result being that many thousands of tons of useless dirt were being carried long distances at a time when transport difficulties were acute. The Controller organized a crusade against the growing evil. As the dirt had its origin chiefly at the coal face, it was felt that if it could be brought home to the coal getters that land and sea transport which might be used for carrying additional food was being applied to the conveyance of dirt, it would have the desired effect, and would certainly influence them more than the existing system of fines. The Secretaries of the Mining Association of

Great Britain and the Miners' Federation of Great Britain were written to, asking for their particular and personal attention to the question, and inviting their active co-operation in improving the position. It was pointed out that the factories of the country, when they are working at top pressure, have their difficulties enormously increased by having to use dirty coal, that the matter was one of real national importance, and that owners, managers, and miners would, by directing their energies to the production of a cleaner commodity, not only be materially assisting the country, but at the same time helping themselves. It had frequently been said that transport (by sea and rail) was largely concerned in the successful prosecution of the War, and attention was drawn to the fact that the coal consumed in public utility companies in the south of England was largely sea-borne, and that if coal containing 10 to 20 per cent. of dirt (and more had been alleged) was sent by steamers carrying from the north-east ports to London, then from 10 to 15 per cent. of cargo space was taken up with dirt, which was of no practical use in the production of gas or electricity; or in the case of land transport the same proportion of each truck of coal is equally wasted, and this at a time when every ship, engine, and wagon which could be made available for the carrying of food-stuffs was of vital necessity to the nation.

Absenteeism—Supply of Coal to France—Output

An influenza epidemic, which commenced in the spring of the year, increased in virulence and raged throughout the summer, being attended with disastrous results to production. It has been estimated that the population of Europe was depleted to a greater extent by the influenza epidemic of this year than as the direct result of the Great War. A peculiarity of the epidemic was that the disease attacked the strong and able-bodied rather than the very young or the old and infirm. The coal-mines suffered as much as all other industries, and in some cases half of the workers were at one time incapacitated for work. The loss of output on this account alone amounted to nearly 3 million tons in the month of July 1918. What with further recruitment of miners and the

effects of the influenza epidemic, the output was reduced to a very low figure. The annual outputs for the war period, up to the end of 1918, were as follows :

		<i>Tons</i>	
1913	. . . .	287,430,473	The maximum yet attained in the history of the coal industry of the United Kingdom.
1914	. . . .	265,664,393	
1915	. . . .	253,206,081	Heavy recruitment of miners.
1916	. . . .	256,375,366	
			The results of the efforts of the Coal-mining Organization Committee are shown in the face of heavy recruitment.
1917	. . . .	248,499,240	
1918	. . . .	227,748,654	The influenza epidemic.

In an endeavour to combat the falling output by urging more regular attendance at work on the part of those miners who were not incapacitated from doing so by reason of accident or ill health, the Controller set on foot a coal production propaganda, himself, as well as the President of the Board of Trade, addressing meetings of workmen and officials in various mining centres. The President and Executive of the Miners' Federation of Great Britain, in execution of their pledge to the Controller that they would do their utmost to increase coal production, issued a manifesto early in August in which they showed the urgent necessity for supplying ourselves and our Allies with that most vital sinew of war—fuel, pointing to the value of coal as a means of exchange with neutral countries, who were able to send us in exchange food-stuffs and raw materials needed for the prosecution of the War, and emphasizing the desirability of preventing the unnecessary suffering that would be caused to the poorer classes in our country by shortage of coal.

The system of Joint Committees, which of late had fallen into abeyance or was being only half-heartedly worked, was revised and intensified. There was to be one at every colliery to inquire into the causes of irregular attendance at work, and also into the reasons for any loss of output which might occur, whether due to irregular attendance or any other cause.

The following extract from a letter which the Controller addressed to both the Secretary of the Mining Association of Great Britain and to the Secretary of the Miners' Federation of

Great Britain, alluding to the desirability of more regular attendance at work, may be quoted. He wrote :

‘ I am not asking the workmen engaged in the Coal-mining Industry to increase the length of their shifts, because I am convinced that if they attend regularly and put increased effort into their work, the country could get the output it wants without lengthening the hours of work per day. I do, however, feel entitled to ask, for the sake of the Country, and as a tribute to those members of the Coal-mining Industry who are facing much greater dangers and more arduous labours in France and elsewhere, that voluntary absenteeism should come to an end, and by voluntary absenteeism I mean a man absenting himself from work when he is not deterred therefrom by reasons of health or other incapacity. It is not creditable, and would not continue if those responsible for it realized the consequences of their action. Voluntary absenteeism is the negation of community of sacrifice. Their comrades in the army are never “ voluntarily absent ”, and go on until they drop.’

The Prime Minister opened the increased production campaign by addressing a meeting of Welsh miners on the 10th of August, when, speaking of the enemy, he urged his hearers to ‘ Sling coal at them ! Hurl it in wagon loads ! Every extra wagon load means winning victories which represent liberty, justice, and peace throughout the world.’

Speaking at Southport on the 20th of August to the delegates to the conference of the British Miners’ Federation, the Controller informed his audience that the coal shortage with which we were faced was nearly 36 million tons ; that he hoped by the rationing of household coal, gas, and electricity throughout the country to effect a saving of between 8 and 9 million tons, which left him with a deficit of nearly 27 million tons which could only be met by a policy of rationing coal supplies to industries which, though not directly concerned with war work, were nevertheless important, and by improved output of coal. The Germans were in worse plight than we were, but they were using the coal weapon against us with the neutrals. ‘ In war time coal was not merely gold ; money could not buy it. It was not only the prime factor in nearly all war materials, but the prime article of barter and bargaining with neutral countries.’ He added :

‘ I may as well tell you quite frankly that during July we have not been able to fulfil our obligations to ship to our Allies and to neutral countries with which we have agreements, and that we are short upon

our shipment programme. In June and July and this month (August) came that serious epidemic of influenza, which fell severely on some coal-fields, and in some cases caused 50 per cent. of the men employed at the pits to be absent for a week. Consequently July must not be looked upon as a normal month, but the output for July was the worst of any month since the War started, being only 15,760,000 tons, or a decrease of over 3,300,000 tons compared with July 1917. This has made the situation precarious.'

On this occasion the Controller read messages to the miners from Admiral Beatty, commanding the British fleet, Sir Douglas Haig, Commander-in-Chief of the British Expeditionary Force in France, M. Clemenceau, President of the French Republic, Marshal Foch, Commander-in-Chief of the Allied Armies in France. The Admiral said: 'Without a regular supply of coal the Fleet would be immobilized, and we feel sure the miners will readily respond to the further calls upon their patriotism.' Sir Douglas Haig wrote: 'The question of an adequate supply of coal for all our needs is almost a vital one for the Allied cause at the present time.' The President sent a telegram in terms characteristic of 'The Tiger': 'There must be no hesitation, no weakness, and no relaxing of effort, but always more and more.' The Great Marshal said: 'Coal is the Key of Victory. Miners of Britain, help me, and let not a moment be lost to hasten the hour of peace.'

It was in August when the coal position was so grave that it was decided to bring back miners from the army without delay. The position continued grave, and even at the time of the signing of the Armistice had shown little improvement; and at the close of the year, though an actual coal famine had been averted, the situation was 'tight', the deficiency in output being about sixteen and a half million tons. In consequence the demobilization of miners had to be hurried forward, arrangements being made to bring back 100,000 from the army. Coal continued to be rationed, exports controlled, and neutral countries were still more severely rationed.

For long the French had been able not only to continue to work several of the colliery groups in the Nord and Pas-de-Calais coal-fields, but did so under a system of intensified production. The other collieries were either within the enemy lines or too near thereto, being under bombardment, to permit of being

worked. The great German advance to the south in the early part of the year, however, cut off a great part of the supply from the collieries, and the reliance of France on Great Britain for her fuel supply became greater than ever. Incidentally also it led to the greater development of the inferior coal-fields of the Loire, the Gare, and the centre of France.

The position in respect of supply of coal to France became one of such moment that it was necessary to discuss in detail with the French representatives in Paris how far and in what manner it was possible for Great Britain to make good the loss in French production, for which purpose the Controller of Coal-mines deemed it advisable to send the present writer to Paris. Accompanied by Mr. Lee,¹ the Secretary of the Control Department, they proceeded to G.H.Q. at Montreuil on the 21st of April, and thence to Paris, where, under the chairmanship of Colonel Young, they discussed with Colonel Petsch and Captains Bletry, Marceaux, and Pilliard the question of the amount and character of the increased coal supplies to France, and after a conference lasting two days arrived at a solution satisfactory to both parties. The French representatives complained that the percentage of dirt contained in the coal had more than doubled as compared with the pre-war days, and that an allowance therefore must be made when comparing supplies in terms of pre-war tonnage. Finally it was agreed that the whole basis of calculation and comparison in respect of French and British coals should be for steam and manufacturing coals in terms of calories, and for gas coals in terms of cubic feet of gas per ton, in both of which respects the British are of course superior to the French coals.

Recruitment

It will be remembered that in the autumn of 1917 arrangements had been made for the withdrawal of 50,000 men from the mines, the first quota of the 100,000 men which it was agreed the coal-mining industry should contribute to the forces. The situation, as far as it could be foreseen at that time, permitted the withdrawal of that number (especially from the exporting districts) without seriously interfering with the necessary supplies

¹ Now Mr. W. A. Lee, C.B.E., Secretary to the Mining Association of Great Britain.

of coal. The net decrease in output for the year ending the 31st December 1917 for the whole country as compared with 1916 was 7,875,000 tons, whereas in the exporting districts alone the decrease was 9,345,000 tons. Thus, although the miners insisted that a system of comb-out by quotas in each district in proportion to the number of men employed should be adhered to, it was felt that by a scheme of mobility bureaux sufficient labour could be removed from the exporting districts to the districts producing coal for inland consumption to meet the increased requirements of the inland trade.

The 50,000 men alluded to were in addition to the 20,000 men voluntarily recruited during 1917. The men were to be Grade 1 men, that is, they would be selected from physically fit unmarried men. The comb-out of the dilutees (see p. 146) had been in progress for some months, but the comb-out of those who had commenced work at the mines since August 1914 had not produced many Class 'A' men.

It was at this time (the end of January 1918) that the Ministry of National Service issued an explanatory memorandum and a new schedule of protected occupations for men employed on Admiralty, War Office or munition work, or in railway workshops, which new schedule came into force on the 1st of February. Undoubtedly it was necessary to protect against recruitment certain industries owing to their pre-eminent importance in the conduct of the War, but the question is capable of being considered from the individual point of view. A 'protected' man had no moral right to immunity from military service, if it could be shown that he could be more profitably employed on behalf of his country in fighting than in industrial work.

The miners decided to ballot on the questions : (1) Shall the Miners' Federation of Great Britain agree to the withdrawal of 50,000 men from the pits for military service ? (2) If so, shall the Federation machinery be used for the purpose of finding the required number ? The ballot resulted in an adverse majority of 28,756 (219,311 voting for the scheme and 248,067 against). A majority of 13,462 favoured the use of the Federation machinery if combing-out occurred. The Prime Minister informed a deputation that the National Service Department would recruit the

men from the mines regardless of the men's adverse ballot, and on the 7th of March the Home Secretary issued a De-certification Order to meet the requirements, and the Directors of National Service in the regions concerned got into touch with representatives of employers and men so that the men selected could be chosen by age groups or by ballot, as might be found most suitable to meet local conditions, adequate safeguards being arranged so as to permit of the retention in the mines of persons who were considered indispensable for the safe working of the mines.

When the German advance took place at the end of March, a request was made by the Minister of National Service (Sir Auckland Geddes) for a further 50,000 Grade 1 men.

It was recognized that the withdrawal of such a large number of Grade 1 men from the mines must seriously reduce the output and necessitate a system of rationing of household and industrial coal (see p. 76), which must cause considerable unemployment and discomfort. Nevertheless the need of men for the army was at that time so urgent and so insistent that, after carefully considering the consequences of withdrawing these men, it was decided they should be taken.

Immediately afterwards France demanded more coal (see p. 192) owing to the fall in output from their Pas de Calais mines. The shipping situation also improved, and more export was required. The matter was again considered, when it was decided to withdraw a further 25,000 Grade 1 men, instead of the 50,000 men, and that 25,000 miners of low medical category should be returned from the army.

By August 1918 the position was that 69,049 of the 75,000 men had been posted and 8,588 of the 25,000 returned to the mines. Not only had the progress of recruitment taken very much longer than had been anticipated, extending (up to mid August, the date at which the position was reviewed) over a period of nearly five months with all its attendant dislocation in the working of the collieries, but the output was further reduced by the failure of the War Office to return promptly the 25,000 men of low medical category.

In addition to the coal demand for France at this time (August),

the demands in connexion with the American Expeditionary Force were increasing day by day from 50,000 tons per month in the autumn of 1917 to from 500,000 to 750,000 tons per month in the autumn of 1918.

All these factors combined to make the coal position in the summer of 1918 far worse than was anticipated in the early spring, both as regarded export and the supplies for inland consumption. Unfortunately, too, all this occurred during the period when, normally, stocking is done to meet the winter peak load of the public utility undertakings of the country, and when transport (both by rail and sea) is far easier than in the winter months.

Arrangements were made, as has been already mentioned (see p. 190), for a publicity campaign in Great Britain with a view to inducing the miners to improve their output, and also to induce consumers of coal, not only domestic consumers but industrial consumers as well, to leave no stone unturned which would result in a reduction of the demands made for fuel. The Executive of the Miners' Federation of Great Britain, with whom the Controller had an interview on the question of increasing the output (see p. 190), passed a resolution, viz. :

‘ That the question of increased output be left with districts, and that districts be advised to carry out the pledge given by the Executive Committee in connexion with the wages question to secure the highest possible output of coal.

‘ That we tell the Controller that we make it a condition, before taking any action to increase the output, that no more men are taken from the mines for the army with the exception of those required to make up the agreed quota at certain collieries, and further that everything is done to expedite the return of low category men from the army.’

In view of all these circumstances, the Controller recommended to the Government that 25,000 Grade 1 men, and the remainder of the 25,000 low category miners, be returned to the mines not later than the 30th of September. Later the Controller agreed to accept 25,000 B 1 men as equivalent to Class A men, but was not prepared to accept more than 25,000 men of a category lower than B 1, for places could not be found in the mines for an undue proportion of men of inferior physique. Men below B 1 category

should in his opinion count as three-fifths of a B or an A man. By October 25,899 miners, chiefly of categories B 2 and B 3, had been released from the army and had returned to the mines; but the scope of the scheme was extended at the beginning of September to include men of B 1 category (who may for coal-mining purposes be regarded as equivalent to 'A' men). The release of miners in accordance with the Controller's modified request proceeded apace up to the signing of the Armistice on Monday, the 11th of November.

CHAPTER XIII

THE YEAR 1918 (*continued*)

The Second Economy Campaign. — The Armistice. — Royalties. — The Control Agreement. — Financial Matters. — Directions as to the Export of Coal and Sale of Coal. — The Whitley Committee's Report and its bearing on the Coal-mining Industry. — Suggested De-control of the Industry.

The Economy Campaign

THE setting on foot of what may be termed the second economy campaign has been alluded to in the preceding chapter, and the causes which necessitated the campaign were touched upon. The Prime Minister opened the campaign in a speech which he delivered at the inauguration of a Red Cross fête at Criccieth in Mid Wales in August, when, besides urging the miners to greater efforts in production, he advised the people to use wood for fuel wherever possible and so save coal for the factories, munition works, and shipbuilding yards. He said those who had got wood should sell it and those who could should buy it.

The press supported the campaign; the people were advised to use anthracite where possible for domestic heating and cooking, the heat value of which is higher than that of any other class of coal. Unlike anthracite in America, this coal has hitherto received but small attention in the United Kingdom as a domestic fuel, a fact mainly due to the belief that for its consumption a closed stove is necessary. Anthracite can, however, be burnt in an open grate, but the fire requires to be started with a little bituminous coal, and when it is going well it should be interfered with as little as possible.

The President of the Board of Trade sent a letter to the Archbishop of Canterbury, to Cardinal Bourne, the Chief Rabbi, the Salvation Army, and the heads of Churches of all denominations in England, Scotland, and Wales, calling attention to the serious shortage of coal, and suggesting that church services should be held in daylight.

Letters were addressed by the Controller to all users of coal for manufacturing purposes, and the chief engineers of electric supply companies, pointing out the necessity of economy in the use of coal. Under the Distribution Section of the Control there had been set up a sub-section dealing with economy in the use of coal in the production of steam, with Mr. D. Wilson, an experienced mechanical engineer, at its head. Under him were district engineers whose duty it was to visit and inspect boilers at works with a view to suggesting economies in the use of coal. The scope and nature of the scheme and the duties of the district engineers were set out in a letter written to them by Mr. Wilson dated the 15th June 1918.

The threatened coal famine was averted, though in August the situation was so grave that, as has been previously stated, the Government decided to recall some of the miners from the Colours to work in the collieries. Whether the combination of efforts which have been indicated above would have sufficed to meet the situation, without the necessity of resorting to still more drastic rationing of coal, had the war continued for much longer, one cannot say. The signing of the Armistice eased the position, enabling, as it did, in a very short time a still further number of miners to be released from the Colours. To the termination of hostilities, therefore, may properly be attributed the averting of the coal famine with which the nation was faced. It was, however, still necessary for many months to exercise strict economy as to coal, for it would be some time before the men would be released in such numbers as to allow of any very appreciable effect in output being realized, besides which months must pass before the returning men would be in training for the work of a miner—fit and healthy they doubtless were, but the work of a miner requires a special ‘habitude’. The Government decided, therefore, that exports must continue to be controlled, and neutral countries were still severely rationed.

Action in respect of Development Work at Collieries

Under Regulation No. 9 G of the Defence of the Realm Act, the Controller of Coal-mines issued, on the 16th March 1918, the following directions :

A.—No owner of a coal-mine shall, without previous written *notice* to the Controller of Coal-mines :

(a) Incur any expenditure on the following objects :

1. The sinking, widening, or deepening of shafts (including underground shafts), or the continuance thereof.
2. The making or driving of slants or adits for the purpose of hauling coal and of cross measure or stone drifts.
3. The opening or reopening of seams.
4. The erection or acquisition of any additional buildings, plant, or machinery not strictly required for purposes of repair or maintenance.

(b) Sell or otherwise transfer the ownership of any mine or part of a mine.

The grant of authorization by other Government Departments, such as, for instance, Priority Certificates or Building Licences by the Ministry of Munitions, or Licences to Import, must not be regarded as in any way committing the Controller of Coal-mines to approval of the expenditure thereby involved.

The sending of any such notice, followed by the Controller's acquiescence, does not in any way prejudge the question of the method in which such expenditure is to be dealt with in the accounts.

B.—No owner of a coal-mine shall, without the previous written *authority* of the Controller of Coal-mines :

1. Increase or decrease the wages or bonus of mine officials or work-people otherwise than in accordance with the awards and agreements of Conciliation Boards or other duly constituted machinery (if any) for regulating rates of wages and bonus in the coal-mining industry ; such awards and agreements, if made during the period of control, not to be effective without the written authority of the Controller of Coal-mines.
2. Increase any director's fees or other remuneration.
3. (a) Increase the salary or other remuneration of any member of the managing, clerical, or administrative staff whose present remuneration exceeds £250 per annum.
- (b) Increase beyond the limit of £250 per annum the remuneration of any member of the staff whose present remuneration does not exceed £250 per annum.
- (c) Grant any war bonus or other special advance to any member of the staff whatever his or her present remuneration may be.

Note. No authority is required for ordinary increases in salary or wages granted from time to time to members of such staffs, provided that the resultant remuneration does not exceed £250 per annum.

Note. A list of all increases which have since the commencement of control been voted to Directors or granted to those members of the managing,

clerical, or administrative staff whose present remuneration exceeds £250 per annum, is to be furnished to the Controller in due course after receipt of this circular.

4. Close any mine or district of a mine or terminate the contracts of any workpeople or mine officials as the result of such closing or with a view thereto.

Note. The owner of a coal-mine must also give to the Controller 60 days' notice of the termination of any lease under which he is working coal, if the termination will involve the closing or abandoning, or is due to the exhaustion of the mine or any part of it.

In order that the Controller may be satisfied that the terms are reasonable he must be consulted and his approval obtained for :

- (a) The execution or renewal of any wagon repair contracts.
- (b) The execution or renewal of any contract for hire purchase or simple hire of wagons.
- (c) Any sale or other contract involving the transfer of ownership of wagons.

The Controller must be immediately advised of the existence of any organized dispute.

The foregoing directions apply to all parts of the undertaking in possession of the Board of Trade.

These directions in part were deemed necessary to prevent any colliery owner who might be so minded from taking advantage of the guaranteed standard of profit to devote some portion of what would otherwise be excess profits to the development of the mine or the higher remuneration of directors and other officials. Some such instances had come before the notice of the Department. For the honour of those engaged in the industry be it said, these were few. Perhaps no edict of the Control Department was so much resented by colliery owners and managers as this, for it was regarded as too great an interference in the detailed management of the mines. The management of collieries felt that the Department might have imposed more trust in their sense of honesty and rectitude. There can, however, be only one answer to this : some collieries *had* overstepped the mark, a check was necessary, and the guiltless had to suffer some inconvenience on account of the transgressors.

Much of the criticism, too, that was directed against the 'development' directions was born of suspicion and fear—suspicion that there existed in the Control Department sinister intentions of exercising greater interference with the routine

management of the mines, and fear that there would be great delay in obtaining permission from the Department for the prosecution of very necessary and legitimate development work, work absolutely necessary if the output was to be maintained. These fears as to delay and friction were not realized, and the legitimate work of the collieries was not retarded, as great elasticity was allowed in the administration of the directions.

With regard to the cost of living advances to colliery officials following on the issue of the above directions, a large number of statements were received of the advances and bonuses already given to higher colliery officials, and also requests for authorization of new advances. The Finance Branch dealt with all officials superior to the certificated managers, and the Production Branch with certificated managers and officials below them. The policy of the latter branch of the Department had been to limit war bonuses in all cases to £1 per week, but (in the case of higher officials) not to interfere with the discretion of owners regarding *permanent* increases in salary within what appeared to be reasonable limits. The intention was to check lavish payments to officials out of excess profits. It was necessary to agree upon a definite policy with the Finance Branch as to the limitations, otherwise it might possibly happen that the Finance Branch might sanction a bonus of, say, £100 a year to an agent at one colliery and the Production Branch refuse a similar bonus to a certificated manager at a neighbouring colliery, whose position and salary might in fact be superior owing to the greater importance and size of the undertaking. In all cases of undertakings partly under the control of the Coal Control Department and partly under that of the Ministry of Munitions, it was arranged that the Ministry of Munitions should be consulted before any advance or bonus was sanctioned.

*Amendment of the Regulations for the simplification of
taking up and working Coal 'Royalties'*

For some time complaints had been received from the owners and management of collieries as to the difficulties that they experienced in obtaining leave to work adjoining royalties. Either the owners of the coal did not desire to have the coveted area worked, or would only permit it at an exorbitant rate, and,

in some cases, the owner of the minerals was unknown or could not be traced. Normally, in the great majority of cases no difficulty is experienced, either in obtaining suitable areas to work, or in getting them on fair and reasonable terms. But these were times when *any* hampering in this direction could not be tolerated; coal was a crying necessity. The following amendment was therefore made in April 1918, and known as 9 GGG :

9 GGG.—1. Where the Board of Trade are of opinion that for the purpose of increasing the supply of coal or coke of any class, it is expedient to work any seam of coal which is in, near, or adjacent to, any open mine and is for the time being unworked, the Board may authorize any person to take possession of the seam and get the coal therefrom, and, subject as hereinafter provided, for the purpose aforesaid to enter on and take possession of any land and execute such works and do such other things as they or he reasonably consider necessary.

Provided that nothing in this regulation shall authorize the opening of any new surface works.

2. The Board of Trade before authorizing any person to take possession of any seam of coal in pursuance of this regulation shall give public notice of their intention in such manner as appears to the Board best calculated to bring their intention to the knowledge of the owners of the land in which the seam is situate.

3. The Board of Trade shall keep or cause to be kept accurate plans of the site and extent of any seam of coal of which possession is taken under this regulation, and also, unless for any reason it appears to the Board unnecessary so to do, accounts of the tonnage of the coal gotten from the seam.

4. In determining the amount of compensation to be paid for any coal gotten under this regulation, regard should be had to the royalties current in the same mining district for the same class of coal, whether upon an acreage or a tonnage basis.

Some matters arising out of the Control Agreement

Subsequent to the coming into force of the Coal Control Agreement, a number of semi-financial matters in connexion therewith arose for settlement and the ruling of the Controller for future guidance. The writer and Sir Arthur L. Dickinson conjointly discussed these matters with the heads of their several sections and put before the Controller the result thereof. Some of the more knotty points may be indicated.

It will be remembered that the Coal-mines Control Agreement

Act laid it down that in fixing a substitute for the profit standard account was to be taken of conditions under which an undertaking had been worked, as to the meaning of which there might naturally be great diversity of opinion. For instance, in the cases of collieries applying for a *substituted standard* owing to *improved* physical conditions prevailing during the control period, it was decided that the 'substituted' output should be calculated on the conditions as to available labour and time worked prevalent in pre-war days. For example, assuming an instance: At a colliery which worked six days a week with all the labour which could be accommodated thereat, and had an output of, say, 1,000 tons a day during the three pre-war years, the improved physical conditions of the colliery in, say, 1917 permitted of an output of 1,500 tons a day at a lower cost, were the colliery able to work full time supplied with all the labour required; but actually, under existing conditions, the colliery only works four days a week owing to market conditions. The substituted standard of profits would have to be based on the profit per ton which could be obtained under *existing* physical working conditions and *pre-war* conditions as to wages, cost of materials, and average selling price, and as to output, the new or substituted standard would be based on an output of 1,500 tons per day and six working days a week.

The question of efficiency of the management also arose—improved results due to more efficient management or to a new policy, either commercial or technical, were considered in the same light as improved 'natural working conditions'. This ruling enabled the Controller to apply for a substituted standard on his own motion in cases where the profits and output were reduced owing to inefficient management.

A case was considered of a colliery concern which had made substantial profits from 1899 to 1908 and had worked at a loss from 1908 to 1915 owing to the collieries having been allowed to fall into a bad state of repair, but which had again been worked at a profit, in 1916, as a result of the plant and the workings having been brought to a normal state. Although these circumstances were independent of natural conditions, it was decided that in this case also the company should be allowed to bring

forward a claim for a substituted standard of profit and output on the strength of improved conditions.

Clause 4 of the Coal-mines Control Agreement afforded food for thought, and was the cause of much difficult work to the Control. Thus the following points arose for consideration thereon :

1. Whether, and to what extent, any of the following conditions should be taken into consideration in arriving at the estimated amount due to any owner under Clause 4 of the Coal-mines Control Agreement :

- (a) Reduced get per man.
- (b) Increased absenteeism.
- (c) Short time worked through lack of 'tonnage' or wagons.
- (d) Concessions forced upon owners by the men independently of any action by the Controller.
- (e) Slacking on the part of the men due to the minimum wage provisions.
- (f) Bonus shifts on Saturdays and Sundays worked when the colliery is working short time.
- (g) Extra pay for men working on extra night shifts when the colliery is working short time.
- (h) Men working on night shifts getting paid six turns for five works.

2. To what extent any of these conditions could be said to be due to the War.

3. To what extent owners could claim that if it had not been for the Control these conditions would not have existed.

4. To what extent owners could claim that if it had not been for the Control they would have been able to increase their selling price to compensate for the various causes of extra cost in working.

While the whole basis of the Agreement was clearly the control of coal-mines, at the same time, with a view to settling compensation, it was competent for the Agreement to deal with circumstances which did not actually arise from control, and it was difficult to say that conditions due to the War, which would be excluded under Clause 8 (1) (a) (viz. 'Had the undertaking been worked during the standard period under similar conditions in all respects excluding conditions due to the War to those

under which the undertaking is worked in the accounting period', &c.), were to be confined to such conditions as arose out of control.

Then as to the words 'similar conditions'. Did these words refer only to the conditions of working the undertaking, namely the colliery, or could they be so construed as to include as war conditions any damage due to the shortage of shipping? When the Agreement was being negotiated, it was always understood that the conditions referred to in Clause 8 (1) (a) were colliery working conditions, but the point was a doubtful one.

Items (a), (b), and (c), it was decided, could in no circumstances be considered as conditions due to the War, and that no relief should be given to owners in respect of increased working costs due thereto. As regards item (d), the same conclusion was arrived at subject to the fact that in some cases the concessions might be such as the owners could have compensated themselves for, if it had not been for some action of the Controller. In particular, increases of wages due to such concessions should be taken into account, inasmuch as the rise in price which was granted to offset these increases was also taken into account on the other side.

As regards items (f) and (g), there might frequently be cases in which, in order to get the colliery ready for working on Monday morning, bonus shifts would have to be worked on Saturdays and Sundays, even though the colliery might be lying idle from Wednesday to Friday. There might be cases in which no compensation should be paid to the owners in respect of these increases, but as a rule it would be found that the expense was a justifiable one.

In respect of item (h), it was decided that this was an increased cost for which allowance should be made, it being in the nature of a general increase in wages, similar to the Conciliation Board awards, or other orders made by the Controller.

The question was also raised as to cases in which owners, by reason of the War, were not able to carry out improvements such as the introduction of mechanical coal-cutters, or the maintenance of the existing number of coal-cutters, because of the restriction in the use of raw materials or other war conditions. It was decided that no compensation could in any event be allowed for such claims.

Directions as to Export of Coal

On the 31st January 1918, with a view to supporting the sterling exchange, the Controller of Coal-mines directed that all quotations for sales of coal, coke, &c. to Scandinavia, Holland, and Spain must be made in the currency of the country of destination, and that payment must be made in such currency to the local agents of the Board of Trade. Minimum currency prices for these countries were prescribed by a new Schedule B, the old schedule having now become Schedule A. The previous directions had required that prices should be f.o.b. A new provision now expressly prohibited quotations or sales at c.i.f. prices.

On the 2nd of March it was directed that the brokerage on freight was to be paid over in full by the exporter to the supplying colliery, subject to special arrangements in the case of France and Italy; but a further direction issued on the 24th of June suspended this in so far as a shipment to France, Italy, and British possessions were concerned, so that in the case of the British possessions the exporter of coal was again permitted to retain 6*d.* per ton. In the case of France and Italy, however, he retained the whole of the brokerage; but 50 per cent. of his remuneration, as fixed by directions, had to be remitted to the colliery, subject to his retaining not less than 3*d.* per ton. The schedule prices were again increased.

On the 5th July 1918 a further increase was imposed by directions, but concessions were granted in the case of shipments for the Belgian Government to Belgian possessions and to Portugal, these countries being now placed on the same footing in respect of prices, exporter's remuneration, and brokerage on freight, as British possessions.

On the 17th of April the Controller directed the imposition of a limit of three months in respect of every contract for the export of coal, and stated that a special surcharge had been imposed on coal shipped to Denmark, viz. of 10 kronen (say 16*s.* 6*d.*). This remained in force until the 24th January 1919.

Coal Prices

When the Coal Control Agreement Act was before the House of Commons, it was subjected to considerable debate and criticism.

The critics were assured by Government that there would be no deficit in the Controller of Coal-mines' Account. If there should be a deficit the Government gave a pledge that the money would not be taken out of the Vote of Credit, but that they would come to the House and ask for special financial provision. The Government held the view that the controlled industry must be self-supporting. On the 19th June 1918, on the report of the Vote of Credit, the matter was again raised in the House of Commons, when Mr. Herbert Samuel, Home Secretary in the last Administration (and now Sir H. Samuel, G.B.E., Governor of Palestine), called attention to the question of national expenditure. It was feared that heavy liabilities might fall upon the State. The apparent result was that an Order was issued, to come into force on the 24th of June, whereby the price of coal under the Price of Coal (Limitation) Act, 1915, was increased in respect of South Wales and Monmouthshire and the Forest of Dean districts, 11s. 6d. being substituted for the standard amount of 4s. (as fixed by Section 1, sub-section 2, of the Act), and in the case of mines situated elsewhere in the United Kingdom, 9s.

On the 8th July 1918 an Order was issued providing for an increase of 1s. 6d. per ton in the price of all coal for home consumption. The prices of coal for shipment for export were increased by 2s. per ton in the case of all vessels the loading of which was begun on or after the 8th of July, this increase being made up of 1s. 6d. to meet the cost of the war wage and 6d. to meet the increased dock charges. Incidentally directions were at the same time issued to the effect that the Control would assume the responsibility for the payment of the war wage as from the 30th of June, and to provide funds for so doing was to be credited by the collieries with 4s. per ton on all coal disposed of on and after that date, which ensured that the whole of the increases in prices which had been granted to meet the cost of the war wage should be specifically applied to that purpose.

On the 26th of October an Order was issued revising the previous directions of the 31st of January and the 8th of February. Under this revised Order:

No coal might, without the consent of the Controller, be sold by collieries for consumption in the United Kingdom

except at the maximum prices chargeable under the Price of Coal (Limitation) Act and the Coal (Pit's Mouth) Prices Orders Nos. 2 and 3, 1918, unless the maximum prices chargeable by the colliery were in any case higher than the price specified in a schedule of prices which was drawn up in respect of different districts and respective classes of coal.

In respect of France and Italy the same prices had to be charged, and in respect of patent fuel 6*d.* per ton extra was charged on coal used in the manufacture thereof for shipment to France and Italy. The position in respect of exporters' services remained practically unaltered.

The Whitley Committee

The Whitley Committee issued its first report in September 1918. In four previous reports proposals had been made for securing a permanent improvement in the relations between employers and workmen and the systematic review of industrial conditions by those concerned, and urged the setting up of Joint Industrial Councils of the two sides. The Cabinet approved, and most industries, and the entire Civil Service, have adopted the recommendation in respect of the establishment of Joint Councils. Much is hoped from this action in the extension of harmonious relations between capital and labour, employers and employed. To some extent a species of Joint Councils had characterized for many years the coal-mining industry, e.g. the Joint Committees of Northumberland and Durham, and Conciliation Boards in various other mining districts. But of late a Joint Board has been set up in each coal-field, with a National Board, on which are representatives from the District Boards; but these were the accomplishment of a later date (see p. 251).

Suggested De-control of the Industry

Towards the close of the last year (1918) the Controller asked the writer for an expression of his views as to what, in his opinion, should be the future action of the Government in respect of control.

Views were expressed as follows :

- As to
1. The cessation of control of coal-mines.
 2. The steps which should be taken to bring about this cessation.
 3. What should be the position of the coal-mines on the cessation of the present system of control.

‘ As to the first point, in my opinion the control of the Coal-mining Industry was a necessary evil, by which I mean that the abnormal condition of affairs due to the War necessitated abnormal treatment of the key industries of the nation in order that the War might be conducted to the best advantage. The Coal-mining Industry is a basic industry—nearly every other industry is dependent on a cheap and effective supply of fuel—owing to the immensity of the problem its control was gradual but ever-increasing. First we had the Coal-mining Organization Committee (early in 1915) and its offshoots—the Coal Exports Committee and the Coal and Coke Distribution Committee, and the Price Limitation Act—and, finally, the amalgamation and expansion of these several component parts (of semi-control) in a complete system of control, and the dissolution of control, if and when determined upon, should follow the same, or nearly the same, sequence.

‘ I think it may be fairly stated that the main objects sought to be secured by control of the industry were :

- (a) The largest possible production of coal, consistent with reduced man power, brought about by the exigencies of the fighting forces.
- (b) The best possible distribution of the product.
- (c) The prevention of the undue inflation of prices.

‘ All that Control has achieved, or set out to achieve, can be comprehended under one of these three heads.

‘ The first named, owing mainly to reduced man power and difficulty in securing plant, necessitated cutting down development work at the mines to a minimum barely sufficient to maintain output. Consequently, after four years’ mining of coal in sight, the mines are in a very backward state of development. In the case of some mines it will take from five to seven years to put them into a pre-war position in this respect. We have, as you know, as soon as the prospect of the return of more men from the army for work in the mines became evident, lifted the embargo on development to a greater extent than has been possible during the war period, and we contemplate complete relaxation in the very near future. In fact the only point we now have to watch is that coal-owners do not in some cases—inasmuch as their pre-war profit standard is guaranteed them—develop at the expense of the Control. The moment the Financial Control is lifted we automatically would release *all* control

over development, and, in my opinion, the sooner this can be contemplated the better it will be in the national interest.

‘ We have, as a necessary corollary to production, the supervision over what may be classed under “ Wages and Disputes ”. This section has perhaps proved one of the most onerous and insistent of our spheres of activity, but now that the Bill having for its object the prevention of the decrease in rates of wages in all industries has become an Act, and the Ministry of Labour is the authority which administers the Act, it logically falls to that Department to deal with wages questions at mines, and our position is only that of an *Amicus Curiae*: we would be consulted by the Labour Ministry, but that is all.

‘ I understand from Sir David Shackleton that a letter is being addressed to you on this subject, and, presumably, we may look to a great decrease in our labours in this connexion. The proper authority to deal with wages questions in all branches of industry in the United Kingdom is the Ministry of Labour. Our difficulty in the past in bringing this about has been the opposition on the part of the miners and mine-owners, who are resentful of the interference of the Ministry of Labour, but some time or other the position must be faced, and now the Act named above provides the occasion.

‘ Committees composed of the management and workmen have been established, or are in course of being established, at each colliery in the kingdom to deal with absenteeism with a view to its reduction, and, generally, to deal with and settle disputes arising between workmen and owners which retard output. These Committees, in so far as absenteeism is concerned, were established in the earlier stages of the war period, but fell into desuetude when, owing to the submarine campaign, export of coal was largely interfered with, resulting in consequent idle time at the collieries. The question arises now, whether they should be continued in existence in view of the release of the miners from the army. Personally, I think they should, at any rate so long as the demand for coal continues to be so much in excess of the supply. The position, it is to be expected, will be improved by, say, April or May of next year with the advent of the milder weather, and the miners released from the army having got “ into their stride ”. It would certainly be of advantage to the industry if these Committees could be kept permanently alive as conducive to better relations between masters and workmen. Though, if they are to be made instruments of intimidation of “ malice aforethought ”, with a view to ultimate control of the industry on the part of the workmen, which is the assured object of a small minority of the South Wales workmen (who appear at present to have captured the lodge machinery in that coal-field), the sooner they are dropped the better, but I lean to the view that they will act as an educative influence ultimately bringing both parties into greater harmony. They could, and I think would, evolve into the Committees advocated in the Whitley Report.

‘The reporting on and the allocation of priority in respect of plant and material for mines has formed a section of our work. I have now secured from the Post War Priority Committee an undertaking that first-class priority will be given in the case of most plant and material required for coal-mines, which will greatly assist development, and there can be no doubt that as the engineering trades get turned over from the manufacture of munitions of war to that of industrial requirements, this section of our work will dwindle and finally disappear. Probably in three or four months’ time there will be no necessity for our assistance.

‘In respect of supply of pit timber, I am sending forward to you a separate memorandum on the subject. Briefly the position will be determinable by the shipping position. I presume, for some time at any rate, there will be a scarcity of imported timber, and home supplies will continue to be drawn upon to a considerable extent for months to come, so therefore the pit timber associations and the distributing committees will have to continue in existence for some time to come. Some of the former will probably be permanently established, and the scheme of areas of supply will continue in existence. However, this is rather more a matter for the Timber Controller than for this Department, although we were the creators of the machinery now engaged in meeting the requirements.

‘Man-power questions end with demobilization. Complete demobilization of the miners will not come about until the Peace terms are signed, but the greater number of the miners in the army will have returned to the mines before then, and I presume that the Control need not remain in existence for the purposes of demobilization. The Central Committee which you have set up, with a chairman nominated by you, and the local committees, could carry on the work of demobilization to its consummation.

‘We have had under consideration a number of cases under Regulation 9 GGG, under the Defence of the Realm Act, whereby the Board of Trade may, for the purpose of increasing the supply of coal, cause an area near or adjacent to any open mine to be worked in opposition to the owner of the said area. This is a most useful power, and it is regrettable that it should be quashed at this stage and until the Committee at present sitting at the Ministry of Reconstruction had formulated its recommendations and they had been carried into effect. This regulation was recently the subject of a memorandum from you to the Ministry of Reconstruction. I attach a copy of the said memorandum.

‘There are other matters with which we deal in connexion with the production of coal with which we have been concerned, but which, being of a minor nature, I need not allude to.

‘So much for the “production” side of the Control. I pass now to (b), the Distribution Section. Presumably, you are asking the opinion of Mr. Hunt thereon. On the supposition that you are so doing I shall limit my remarks to expressing the following opinion, viz. :

‘ Supply and demand of coal will rapidly approximate, if not meet, in the spring. When this stage is attained the machinery for internal distribution—and in this line I include domestic rationing—will, or should, automatically come to an end.

‘ It will, however, be necessary to maintain control over export of coal, otherwise the same situation would probably arise as characterized the industry some three and a half years ago, namely, coal would be exported to the detriment of home requirements, but the control at present exercised by the Coal Exports Committee could continue to be exercised by such Committee or its functions performed by the departmental officers of the Board of Trade. In fact, in my opinion this could be done almost at once, as there is hardly scope, now that the work runs on well-marked lines, for the maintenance of a Committee. When production is in excess of the home and export demand the departmental control of export would, or should, cease.

‘ It would be regrettable were the well-conceived scheme of inland transport of coal to be scrapped. The scheme would work in admirably with an amalgamation of colliery interests such as I set out below—but I presume the proper authority to consider and deal with this as a post-Control of Coal-mines measure would be the Railway Executive.

‘ The control of prices (*c*) likewise should continue until production is in excess of the demand for home consumption and export at the stage which would be probably reached within a year from now, by which time the producing power of the French, Belgian, and German mines will probably have reached a pre-war standard. As in the case of control of export, this matter might be dealt with by a permanent Department.

‘ From my observations it would seem that the natural period of cessation of the present system of control is the early summer of next year. But seeing that the control of coal-mines was instituted in the interests of the nation and not necessarily in the interests of the owners of the mines, it is only fair to the latter that control should not be relinquished until the industry is left in such a condition that the owners are able to carry on effectively. In any event the relinquishment should be gradual and on such lines as I have endeavoured to indicate.’

The Armistice had been signed. Prices of coal, especially for export, were very high, and the outlook presented no great obstacles in the way of de-control. The demands of the workmen for an advance in wages and a reduction in working hours had not yet been presented, but even if they had it still appears to the writer that the earliest opportunity should have been taken to initiate the work of de-control. A system of control of such a vast and complicated industry as the coal-mining industry of this country is only warranted by the abnormal circumstances

which inaugurated it. It was a necessary evil, and at best, and of necessity, a policy of expedients. The sooner the management was unhampered, and the representatives of the coal-owners and workmen could meet and negotiate as between themselves without the intervention of Government, the better for all concerned. It would have been wiser to have de-controlled when prices were high and likely to remain high rather than when the bottom was out of the market. Wages were bound to come down, and it would be easier for all concerned if the descent were gradual rather than sudden, as was eventually the case. The writer is aware that in advocating thus early de-control of the industry, he has the support of few, if any, either of the representatives of the colliery owners or of the workmen. The former might very naturally take up the attitude: 'You, the Government, took over our collieries on your own initiative. When you took them over they were in general in a fair state of development and the rate of wages was moderate. When you cease control, it is only right and proper that you should hand them back to us in the state in which you took them over. We have, at your request, worked the mines without looking too far ahead, so as to give you as much coal as possible during the war period. You have granted advance upon advance to the workmen—wages which, except at the present high price of export coal, we could not afford to pay, and some collieries (which owing to their geographical position have no export trade) cannot in fact pay. We say when you hand over the collieries to us, see to it that conditions are on all fours with those existing prior to control.' This is not an exact reproduction of the expressions used by any recognized body of coal-owners, but such is an aggregation of the views which have been commonly expressed. But, be it remarked, had the collieries not been under Government control during the war period, it is very doubtful whether they would have been in much better shape subsequent to the War than they actually were—probably worse, by reason of the difficulty of obtaining materials during the prevalence of the War. Coal prices would have soared and the workmen have demanded higher wages, and the industry would have suffered from strikes to a greater extent probably than was the case under Government control.

The representatives of the workmen who at the outset had been suspicious of control had come to welcome it, and some of them saw in it a step towards some form of nationalization of the industry, a consummation which they had much at heart.

Well, much has happened since the writer put forward his views as above. We have been threatened with one national coal strike, the Coal Industry Commission has met and reported, we have experienced a national strike of miners, and the colliery owners and workmen have settled their differences, and have agreed upon a national scheme for the harmonious carrying on of the industry, to which further reference will be made in these pages.

SECTION III

DE - CONTROL

CHAPTER XIV

THE YEAR 1919

A Gloomy Opening. — Death of the Controller. — Labour Unrest. — The Coal Industry Commission. — Result of the Inquiry. — Wages. — Persons employed. — Output. — Increased Cost of Materials used in Mines. — State of the Coal Trade. — Prices. — Profits. — First Steps towards De-control.

A Gloomy Opening—Death of the Controller

THE year 1919 will probably go down in history as the most memorable one in the annals of the coal-mining industry of the United Kingdom. The year opened gloomily, for, although the total output of coal showed an upward tendency, this was owing to the augmentation of the labour employed in the mines by the return of a considerable number of ex-miners demobilized from the army, and not to increased output per person employed ; the home demand was in excess of the supply available to meet it, and our obligations to our Allies imposed certain limits to the restriction of export.

The horizon was overcast with great and imminent labour troubles ; working costs, due to the rise in wages (principally the result of the increased cost of living) and the unprecedented increase in the price of materials used in mining, had attained a figure hitherto unknown in the history of the industry, and the inadequacy of the transport facilities, both by sea and land, prevented the amount of ' clearance ' at the collieries and the ports requisite to meet the possible output.

Early in February, after a short illness, there passed from his labours Sir Guy Calthrop, Bart., the Controller of Coal-mines, overwork and anxiety rendering him a ready prey to the prevailing

epidemic of influenza. Though not a man of, nor pretending to, high intellectual attainments, Sir Guy Calthrop was an admirable and experienced man of affairs, slow to make up his mind, but when once he came to a decision, quick and firm in action; possessed of a strong sense of duty and unsparing of himself. Being singularly frank and honest in thought and expression, he was a good negotiator; owners and workmen alike soon came to accept his word as final; withal he was very human and very charitable, and verily it might be said of him: 'Certainly it is heaven upon earth to have a man's mind move in charity, rest in providence, and turn upon the poles of truth.' As he was dying, and only semi-conscious, but knowing his end was near, he dictated a letter to the Prime Minister, and another to Mr. Robert Smillie, dealing with the impending labour trouble. 'It is the last I can do for my country,' he murmured. He died a few hours later.

For some weeks following the death of the Controller, the present writer and Sir A. L. Dickinson carried on the work of the Department, until the appointment of Sir Evan Jones, Bart., M.P., a distinguished civil engineer who, at the request of the Government, undertook the office in the middle of March.

Labour Unrest—The Coal Industry Commission

The number of disputes between owners and workmen and between the Government and the workmen during the year 1919 was greatly in excess of that of the previous year, and in this connexion the figures given below are of interest. They are in the form of a comparative statement for the first eleven months of the years 1918 and 1919, and are taken from the *Labour Gazette*, being based upon returns from employers and workpeople.

<i>Period eleven months</i>	<i>Number of disputes</i>	<i>Number of workpeople involved in all disputes</i>	<i>Aggregate duration in working days of all disputes</i>
1918 . .	134	356,000	1,081,000
1919 . .	208	901,000	7,406,800

The demands of the miners, with which the Government was faced at the commencement of the year, were in respect of wages, demobilization, and hours of work. They asked for an increase

of 30 per cent. on existing wages, less war wage ; full discharge of demobilized miners, and a six-hour working day—that is, six hours actually below ground in every twenty-four hours. These demands, made on the 9th of January, were in respect of all members of the Miners' Federation, whether employed in coal-mines, stratified ironstone, ganister, clay, or lead-mines, and included the workers employed in coke-oven and by-product plants. To these they later added a demand for the 'nationalization' of the coal-mines.

The Government did not see their way to acceding to these demands, but made a counter offer of a flat rate advance of 1s. per day, which the miners would not accept, and a disastrous national strike of miners appeared imminent—disastrous at any time, but peculiarly so at this juncture, when so much was pending on the continent of Europe.

After prolonged negotiations between the Government and the miners the latter agreed to accept a commission of inquiry into the whole of the questions—a free and absolutely untrammelled inquiry, the Commission to consist of twelve persons and a chairman, three of whom should be representatives of the miners, three representatives of the coal-owners, and six other persons noted for their economic knowledge, three of whom were selected by the Government, and three by the miners.¹ The Prime Minister, on the 24th of February, introduced into Parliament the Coal Industry Commission Bill, by which a Commission was set up, clothed with statutory powers for inquiring into the position of, and the conditions prevailing in, the coal industry. The unusual course of investing the Commission with full statutory powers was taken in order to enable them, if necessary, to command the attendance of witnesses, to compel them to give evidence, and to force them to produce all documents relevant to the inquiry. The Commission was presided over by Sir John Sankey, G.B.E., Judge of the High Court, and has come to be designated under his name—the 'Sankey Commission'.

¹ The present writer was Assessor to Mr. Justice Sankey, and sat with him throughout the inquiry. Mr. S. Chapman, C.B.E. (now Sir Sydney Chapman, K.C.B., C.B.E., Permanent Secretary, Board of Trade), and Mr. H. J. Wilson, C.B.E. (now Mr. H. J. Wilson, C.B., C.B.E., Secretary of the Ministry of Labour), were also Assessors.

The work of the Commission was divided into two stages—the Government adopting the majority interim, or first stage, Report, dated the 20th of March, ‘in the letter and the spirit’. The effect of the adoption of this Report was undoubtedly to relieve the tension, and there can be little doubt that had any other course been followed the country would have been plunged into a national coal strike, the end of which no one could foresee.

*The Effect on the Industry of the Findings of the Commission—
Readjustment of Piece Rates*

The effect of the Majority Interim Report of the ‘Sankey’ Commission was the securing by the miners of

1. A seven-hour working day, that is, the substitution, as from the 16th of July, of the word ‘seven’ for the word ‘eight’ in the Coal Mines Regulation Act of 1908, and a further reduction to six hours as from the 31st July 1921, ‘subject to the economic position of the industry at the end of 1920 warranting it’. (N.B.—As a matter of fact the economic position of the industry at the close of 1920 did not warrant it, and the position is such at the time of writing (November 1921) that many persons are asking whether the economic position, which is still worse, does not warrant a return, if only temporarily, to the eight-hour working day.)
2. The Act of 1908 being applicable only to persons employed below ground, the hours of surface workers at collieries were dealt with separately and reduced to $46\frac{1}{2}$ working hours per week, exclusive of meal time.
3. A flat rate advance in wages was granted of 2s. per shift upon days worked, and in the case of persons under 16 years of age of 1s.

The economic effect of these great changes in hours and wages on the industry has been far reaching. It was estimated by the writer, and given by him in evidence before the Commission, that the decrease in output consequent upon the reduction of hours would be slightly under 10 per cent. per annum—that is, 10 per

cent. on the same number of persons employed—and the result in practice was not very wide of the estimate, the average figure for the latter half of the year being between 10 and 11 per cent. It was estimated, on figures supplied by Sir Arthur Lowes Dickinson, that the cost of the changes to the industry would be increased by £43,000,000 per annum—£30,000,000 in respect of wages and £13,000,000 owing to decreased output at 10 per cent. over six months of the year on an estimated output of 250 million tons. The estimated output, however, was not attained.

To meet this sum it was proposed to allow to the coal-owners an average profit of 1s. 2d. per ton on the coal raised, which, again, working on a basis of an output of 250 million tons for the year 1919–20, gave a sum of £39,000,000, arrived at by deducting £15,000,000 (250 million tons at 1s. 2d.) from £54,000,000, the profit that might have been earned on the pre-Sankey basis of wages and hours. It was deemed advisable to reduce this sum by £9,000,000 as discounting a probable fall (which was not realized as the price increased) in the cost of coal to neutral countries, leaving £30,000,000, or a deficit of £13,000,000.

In view of the fact that the reduction in hours of work was not to affect the wages of the miners, it was necessary to readjust the piece-rates payable to coal getters and others engaged on contract work. As bearing on this it should be stated that the incidence of the reduction of working time was not the same for all districts; thus, in the case of Northumberland, some classes of workmen experienced little or no reduction, others a reduction of as much as 60 minutes per shift.

Without waiting for the decision of the Controller of Coal-mines on the point, the representatives of the owners and workmen in some districts arrived at an arrangement whereby an advance of 14·3 per cent. on piece-rates was agreed upon. The reasoning which led to the decision was apparently as follows: A reduction of one hour, i. e. the substitution of seven for eight in the 'Eight Hours' Act, is equivalent to a reduction of 12·2 per cent. in point of time, but in order to bring seven hours up to eight hours one-seventh must be added = 14·3 per cent. If this was the method of reasoning adopted it was obviously fallacious.

The Controller did not sanction the advance so calculated, but

devised the following formula to meet the case for application district by district :

The reduction in output as calculated over the whole country, viz. 11·1.	×	The reduction in point of time in respect of any given class of workmen in the district in ques- tion.
--------------------------------------------------------------------------------	---	-----------------------------------------------------------------------------------------------------------------

47

The average reduction in output being at first taken at 10 per cent. in accordance with the finding of the ' Sankey ' Report, it was eventually agreed between owners, workmen, and the Government, to take 11·1 per cent. as representing the reduction. The constant 47 is the average reduction in minutes in working time for the whole country. The Yorkshire miners would not at first accept the settlement as to the mode of calculation arrived at between the Government and the Miners' Federation, and came out on strike ; but ultimately they accepted the decision, having been on strike for several weeks.

Wages

No reliable statement of the actual earnings of persons employed in coal-mining had ever been produced for the industry as a whole before the sitting of the ' Sankey ' Commission, but on that occasion the Controller of Coal-mines furnished returns from which the following interesting results as to the earnings per head are summarized. They may be taken as the average earnings at the beginning of the year 1919.

ALL DISTRICTS, NOVEMBER 1918

	<i>All underground workers</i>	<i>All surface workers</i>	<i>All workers</i>
Average daily number on pay rolls of collieries making returns . . .	368,613	96,579	465,192
Average number of shifts worked per head (4 weeks) ¹ . . .	20·2	23·1	20·8
Average earnings per head :	£ s. d.	£ s. d.	£ s. d.
Whole period (4 weeks) ¹ . . .	13 11 9	10 16 8	13 0 4
Per week ¹	3 7 11	2 14 2	3 5 1
Per shift	0 13 6	0 9 5	0 12 6

¹ The number of shifts worked in November, and the total earnings, were affected by holidays taken in consequence of the Armistice.

The average earnings per shift in the United Kingdom in the months of November 1913 and 1918 respectively were as follows :

		<i>November 1913</i>	<i>November 1918</i>
		<i>s. d.</i>	<i>s. d.</i>
All underground workers	. . .	7 1	13 6
All surface workers	. . .	4 8	9 5
All workpeople	. . .	6 7	12 6

The average earnings of the coal hewers, who are in most cases paid on a piece-work basis, and who comprise about 40 per cent. of the persons employed below ground, were, of course, considerably in excess of the figures quoted above. The following particulars show the position in the different coal-mining districts in respect of the *percentage* advanced received on wages above the standard for the years 1918 and 1919 as compared with the pre-war period :

PERCENTAGE OF WAGES ABOVE STANDARD

	<i>31st July 1914</i>	<i>31st Dec. 1918</i>	<i>31st Dec. 1919</i>	<i>Date of standard</i>
Northumberland . .	50	120	120	1879
Durham . . .	57·5	107·5	107·5	1879
Federated district . .	65	{ 118·3 = 45·5 (a)	118·3 = 45·5 (a)	1888 1911
South Wales . . .	60	{ 133·75 = 55·83 (b)	133·75 = 55·83 (b)	1879 1915
Scotland . . .	75	150	150	1888

(a) A new standard, known as the 1911 standard, was adopted in 1915. This is 50 per cent. above the 1888 standard.

(b) A new standard was adopted in July 1915. This was 50 per cent. above the standard of 1879.

Note.—The figures for 1918 and 1919 are exclusive of the war wage granted in September 1917, when advances were made in the form of a flat rate of 1s. 6d. per day for men and 9d. per day for boys. The 1919 figures are exclusive of the ‘ Sankey ’ wage of 2s. per day for men and 1s. per day for boys.

Workmen's Compensation

Before leaving the subject of wages, there is one further improvement in their position, from a financial point of view, which the miners secured during the year under review, namely in respect of the compensation payable to them owing to loss of work from accident received whilst following their occupation. Under the Act of 1906 the maximum compensation was 50 per cent.

of a workman's average weekly earnings ; but the Workmen's Compensation (War Addition) Acts, 1917 and 1919, provided that, during the continuance of the recent war and for a period of six months thereafter, a weekly payment receivable by a workman in respect of total incapacity should be increased by an addition of one-quarter (by the 1917 Act) and three-quarters (by the 1919 Act) of the amount of the weekly payment.

Persons Employed—Output

At the beginning of the year 1919 a total of 961,000 persons were employed at the coal-mines below and above ground as compared with 1,124,670 persons on the 30th of April 1919, or an increase of 163,670 persons, which by the 8th of November was still further increased by 38,827, or a total of 1,163,497. With this increase of over 200,000 persons in the personnel, had the rate of output per person employed been maintained at the figure which characterized the early years of the war, a very considerable increase in the total output would have been obtained and the figure of 250 million tons might have been achieved for the period June 1919–20, but the fact that while the output for 1917 was 248,499,240 tons and for 1918 was 227,748,654 tons, that for the year 1919 was 229,779,517 tons, shows how far the actuality fell short of the estimate.

The Decline in Output per Person Employed

The actual average output in tons per man *per shift* per annum—the only correct way of determining output per man employed—for the years 1913 and 1918 inclusive was :

1913	.	.	.	.	1.00
1914	.	.	.	.	0.98
1915	.	.	.	.	1.02
1916	.	.	.	.	1.00
1917	.	.	.	.	0.96
1918	.	.	.	.	0.94
And for the first 20 weeks in 1919	.	.	.	.	0.89

More than one reason was put forward to explain the decline which set in in the year 1917 and continued certainly over the first half of 1919. Among these were :

- (a) The backward state of development of the mines and lack of plant.
- (b) The probable fact that the incoming men, owing, in the case of many of them, to long absence from the mines, had not yet got into their stride.
- (c) The fact that many men were working on the minimum wage, which, together with the war wage and the flat rate advance ('Sankey' advance), allowed of a considerable daily wage being obtained without resorting to piece-work.
- (d) Generally, the high rates of wages.
- (e) Insufficient transport, preventing 'clearance' at the collieries—surface and underground.

Probably the correct explanation is to be found in a combination of these causes, but short of a detailed mine-to-mine inquiry it was not possible to pronounce positively on the point.

Increased Cost of Material

The cost of material had been rising steadily during the War (see p. 41); thus :

Pit wood had risen between 1914 and 1918 over 200 per cent.						
High explosives	„	„	„	„	175	„
Gunpowder	„	„	„	„	nearly 100	„
British oats	„	„	„	„	250	„
Imported oats	„	„	„	„	over 200	„
Hay	„	„	„	„	nearly 130	„
Wire ropes	„	„	„	„	100	„

And whereas the cost of stores and timber was 2s. 10 $\frac{1}{4}$ d. per ton at the end of 1917, it had risen to 3s. 6.48d. by the end of the second quarter of 1918.

The rise in the price of materials undoubtedly continued during the year 1919. For example, during the first eleven months of 1919, compared with 1917, the price of pit wood increased by 20 per cent., gunpowder by 1 per cent., and British oats by 6 per cent.; on the other hand, the price of imported oats decreased by 4 per cent. It would be within the mark to say that for materials alone the cost of production per ton of coal raised had trebled by the end of 1919, as compared with the period immediately preceding the outbreak of war.

The State of the Coal Trade

It was deemed advisable to continue to ration the supply of coal to domestic consumers. There was an increase in the amount of coal exported during the year as compared with the preceding year 1918. A comparative statement for the four years 1917-20 inclusive is given on p. 225.

These figures show the enormous increase in the value of exported coal, and had we been in a position to export the same quantity that we did before the War, viz. 75 million tons, though the price per ton would, in consequence of the increased supply available, have been considerably less than it was in 1919, yet there is little doubt that something close upon twice the revenue actually obtained over the year would have been secured.

Coal Prices

Although the conclusion of the Armistice did not involve any change of importance in the export of coal policy, restriction was still deemed necessary and preference continued to be given to the Allies over neutrals. Certain changes were, however, made in regard to the control of the export of coal, which may be mentioned. Thus, on the 28th February 1919, shipments to Belgium were placed on the Franco-Italian footing in respect of exporters' remuneration and brokerage, and in March the Controller of Coal-mines did away with the Coal Exports Committee, the Department absorbing its work. On the 10th of March an order was made prohibiting the delivery, under pre-war contracts, without the express consent of the Controller of Coal-mines. The requirement as to payment abroad (see p. 206) in local currency was abolished, except in the case of Holland and Spain, on the 16th of May, and the three months' time limit in respect of contracts was also removed.

In spite of vehement protests, especially on the part of France, the British Government decided that our colliery owners ought no longer to be compelled to sell their coal, even to the Allies, at prices below those that were obtainable in the open market, so by an Order dated the 28th May 1919 minimum prices were substituted for fixed prices in the case of shipments to British possessions and

EXPORTS OF COAL, COKE, AND MANUFACTURED FUEL FROM THE UNITED KINGDOM

	1917		1918		1919		1920	
	Quantity (long tons)	Value (£)	Quantity (long tons)	Value (£)	Quantity (long tons)	Value (£)	Quantity (long tons)	Value (£)
Coal	34,995,787	46,547,621	31,752,904	48,026,492	35,249,568	83,213,714	24,931,853	99,627,146
Coke	1,278,646	2,520,224	915,921	1,969,153	1,509,010	5,052,797	1,672,931	9,944,328
Manufactured fuel	1,526,272	2,273,642	1,505,090	2,420,685	1,708,015	4,031,174	2,258,111	10,747,767
Total	37,800,705	51,341,487	34,173,915	52,416,330	38,466,593	92,297,685	28,862,895	120,319,241
Foreign bunkers	10,227,952		8,956,476		12,021,242		13,923,186	

protectorates, France, Italy, Belgium, and Portugal. No coal, without the consent of the Controller of Coal-mines, was permitted to be sold by collieries except at the maximum prices chargeable under the Price of Coal (Limitation) Act and the Coal (Pit's Mouth) Prices Orders 2 and 3, 1918 ; provided, however, that in any case where the maximum price chargeable by a colliery for a particular class of coal for consumption in the United Kingdom was higher than the scheduled prices, the colliery was permitted to charge for inland consumption prices lower than the maximum but not lower than the scheduled price. The schedule contained a very extensive classification of coals under the merchantable name of the coal, but it is too extensive for quotation. Schedule ' A ' covered prices for the United Kingdom, and for coal shipped to British possessions and protectorates, France, Italy, Belgium, and Portugal, including coal stations therein, and Schedule ' B ' gave the prices of coal for shipment to other destinations outside the United Kingdom.

As a corollary to this Order, the system whereby local Committees (see p. 130) allocated business in respect of the French and Italian trade ceased to exist. Trade again became open to competition, and the system of centralized buying, which had worked so well under war conditions, became impracticable. But the Controller appointed a representative in each shipping centre with power to authorize shipments on his behalf.

To meet the financial deficiency created by the ' Sankey ' advance in wages and the decrease in output contemplated as the result of the reduction in working time, the Controller of Coal-mines calculated that an increase of 4s. 6d. per ton in the selling price of coal would be necessary. When the estimate was prepared, however, no deduction was made either for the amount of coal consumed at the collieries and supplied to miners, or for the amounts for export and bunkers. It was therefore found necessary to increase the price 6s. instead of 4s. 6d. per ton, and this was added to the scheduled prices. This increase in the minimum prices applied, in the case of all cargoes and bunkers, to those the loading of which commenced on and after the 21st July 1919. In making the calculation, the output of coal for the twelve months from the 16th July 1919 was estimated at 217 million tons, and

the financial deficiency on the working of the coal industry for a period of twelve months from the 16th July 1919 was taken to be £46,600,000. These figures were severely challenged by the representatives of the miners both in and out of Parliament, it being asserted by them that the increased price of coal to consumers was not warranted.

There were sporadic strikes against the Government proposal, and in view of the opposition of the miners to the proposed advance the Government on the 14th of July offered to postpone as from the 15th of July to the 21st of July the increase on the condition that the miners would take immediate steps to increase the output and would undertake that there should be no further stoppages, but the miners would not accept this proposal, and on the 21st of July the strike area was extended to Nottinghamshire and Derbyshire. Owing to the Midland and Yorkshire strike many steel works and textile mills were closed down, but on the 25th of July an agreement was reached with the Government as to the piece-work rates. Still, however, Yorkshire stood out until the end of the month, when they accepted the concession of the Government of 14.2 per cent. on the piece rates.

In mid-November a lively debate occurred on the coal policy of the Government on a motion by Mr. Brace¹ asking for the appointment of a Select Committee to inquire into the administration and functions of the Coal Controller and the position of the coal industry with regard to selling prices, profits, cost of production, and output. On this occasion the President of the Board of Trade said if outputs were maintained and there were no stoppages other than for recognized holidays, he was prepared to recommend to the Government to take risks and lower the price, not by 6s. per ton—that was impossible with the present output—but by a smaller amount; but a few days later, viz. on the 24th of November, he announced in the House of Commons that a reduction would take place at the rate of 10s. a ton in household coal, to commence as from the 1st of December, and to be applicable also to coal consumed at gas and electricity works. The prices of coastwise and foreign bunker coals being so

¹ The Rt. Hon. William Brace, a Labour Member of Parliament for a South Wales constituency and now Labour Adviser to the Mines Department.

high as to affect the average level of freights, a reduction was necessary in this direction also, and these prices ultimately were fixed at Schedule ‘ A ’ prices less 6s. per ton, but a decision as to foreign bunker was deferred. The President argued that the estimated output of 217 million tons was warranted at the time it was made, and that no one could have foreseen the great rise in export prices, the effect of the increase in output and export prices being such as to convert the problematical deficit into a profit of £170,000,000 at the end of the financial year. The great rise in export prices is demonstrated by the few selected instances set out below :

	<i>Per ton</i> <i>3rd Jan. 1919</i>		<i>Per ton</i> <i>4th July 1919</i>				<i>Per ton</i> <i>24th Dec. 1919</i>			
	(a)		<i>Allied</i> <i>prices</i>		<i>Neutral</i> <i>prices</i>		<i>Allied</i> <i>prices</i>		<i>Neutral</i> <i>prices</i>	
	<i>s. d.</i>	<i>s.</i>	<i>s. d.</i>	<i>s.</i>	<i>s.</i>	<i>s.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s.</i>
Best Northumbrian steam, coals, f.o.b. Tyne .	37 0	to 80	70 0		90		100 0	to 105 0		
Best Northumbrian smalls f.o.b. Tyne . . .	27 0	„ 50	45 0	to 54	55 to 70		65 0	„ 80 0		
Best Durham gas coals, f.o.b. Tyne . . .	32 0	„ 65	55 0		70 „ 75		85 0	„ 90 0		
Foundry coke, f.o.b. Tyne	49 6	„ 65	49 6	„ 55	65 „ 70		100 0	„ 110 0		
Best Welsh steam coals, f.o.b. Cardiff . . .	40 0	„ 50	40 0				95 0	„ 105 0		
Scotch ell coals, f.o.b. Glasgow	32 6	„ 35	33 6	„ 35			70 0	„ 76 0	85 0 to 90	
First class steam coals, f.o.b. Methill	33 6		35 0				71 6	„ 73 6	87 6 „ 90	

(a) This range of prices includes both fixed limitation prices and minimum prices for neutrals.

Profits in Coal-mining

During the year the subject of the profits of coal-owners loomed large. It figured prominently before the ‘ Sankey ’ Commission, and since then has been much discussed in the columns of the daily press and in Parliament.

Much misconception exists on the point ; all colliery owners are not millionnaires, though some approximate to that position. That coal-mining is a most speculative industry was shown before the ‘ Sankey ’ Commission by Sir A. L. Dickinson, who furnished particulars of the profit or loss per ton of coal disposable from certain collieries during the September quarter of 1918. He gave

particulars of 458 collieries producing in the aggregate 38,878,500 tons; of these, 75, producing 3,119,939 tons, were worked at a loss, the remaining 383 being worked at a profit.

He stated, further, that the average profit for the five years ending 1913, after deducting depreciation direct before charging royalties and interest (that is, the income-tax basis of profits), was 19 million pounds. Deducting royalties at 6 million pounds, a profit of 13 millions remained, equivalent to just under 1s. per ton on the 270 million tons raised. By way of comparison, the profits per ton of disposable coal, inclusive of interest but exclusive of royalties, for the year 1917-18 were :

					s.	d.
For the quarter ended the 31st December 1917	.	.	.	.	1	8 $\frac{3}{4}$
" " " " 31st March 1918	.	.	.	.	1	11·49
" " " " 30th June 1918	.	.	.	.	1	10·41
" " " " 30th September 1918	.	.	.	.	3	11·84

Later figures are not available to the writer.

The acceptance by the Government of the Interim Report of the Coal Industry Commission, which recommended that the coal-owners should be allowed to retain 1s. 2d. per ton of coal raised, necessitated the introduction into Parliament of a Bill to give effect to the recommendation. The Bill was to cover the period ending March 1920. The Government were prepared to exclude from the operation of the Bill profits from auxiliary undertakings, such as coke ovens, to make an allowance from the annual wastage of capital expenditure upon development (in other words, allow for amortization), and to make a reduction of the assessment for income tax to meet the reduction in profits under the Act; but owing to the opposition of both coal-owners, workmen, and others—who had different reasons for their opposition—the Bill was withdrawn early in September.

What was the state of many collieries towards the close of 1919 was shown by an answer by the President of the Board of Trade (Sir Auckland Geddes) in the House of Commons on the 3rd of December. He said he was aware that many colliery owners were now working their collieries at a loss. The increase in wages and other costs had made it necessary to provide more working capital. In any case, however, in which collieries were financially embarrassed it was the practice of the Controller to

make advances. He recognized that the reduction in the price of household and domestic coal would increase the need for such advances both in frequency and in amount. As to those collieries which had represented that they would be unable to continue the supply of household coal at the reduced prices, steps were being taken to meet the financial difficulties. They had been instructed to continue normal working and distribution, and he had no doubt they would continue to carry out the instructions.

Schemes for the Control of the Industry.—Proposed Nationalization of Mineral Rights

The second stage of the Coal Industry Commission terminated with the production of four reports. The Chairman and all the members of the Commission pronounced in favour of the acquirement by the State of the coal royalties, but whereas the Chairman, the owners, and others were in favour of purchase, the three miners' representatives were not. The Chairman reported in favour of State ownership of the coal-mines under a system of administration by local and district councils presided over by a Ministry of Mines, and the miners' representatives, together with Sir Leo Chiozza Money, Mr. R. H. Tawney, and Mr. Sidney Webb (the three economists nominated by the miners to the Commission), were in substantial agreement with the Chairman's report, but departed from it in regard to certain details of administration and of compensation to owners, and advocated the acquirement by the State of all coke-oven and by-product plant attached to collieries. The representatives of the coal-owning interests, together with Sir Allan Smith and Mr. Arthur Balfour (two of the three independent 'industrial' representatives on the Commission), on the other hand, were opposed to the nationalization of the coal-mining industry. Sir Arthur Duckham (the remaining 'industrial' representative), whilst opposed to nationalization, advocated unification of collieries with a view to more effective working and control.

The Government accepted the principle of acquisition by the State of the mineral rights with just compensation to the owners thereof, and, whilst not accepting nationalization of the collieries, put forward a scheme of unification of collieries and

representation in the control thereof by representation of the workmen—that is, a certain measure of joint control. But, at a meeting which the Executive of the Miners' Federation had with the Prime Minister the miners stated that rather than accept the Government proposals they would return to pre-war conditions. It was nationalization or nothing with them, and so the position stood at the close of the year.

Backward Condition of the Coal-mines—Arrested Development

The condition of the coal-mines, more particularly in respect of the underground development, had suffered severely during the War. Through the pressing need for coal and the reduction in the number of workmen available for its production owing to military exigencies, it had been necessary to work the most productive seams and areas, leaving the exploitation of the more difficult parts of the mines to a later date ; this, coupled with the difficulty of obtaining plant, caused the mines to get into a backward state, and it was stated by those well qualified to express an opinion that in some districts it would take five years to put them into a pre-war condition. Added to this, the uncertainty as to the future of the control of the industry acted as a check to the opening out and development of new undertakings, as capitalists were shy of embarking on the expenditure of large sums in so speculative an industry for a long-deferred and probably reduced return on their money. Yet never were the prospects of trade in coal so bright as at the close of 1919 and the opening months of 1920 ; if only peace were to settle down on the industry, and capital and labour were to unite with the common object of securing enhancement of production, a period of great prosperity would undoubtedly result.

The Land Transport Scheme

After being in existence for close on two years, the Coal Transport Reorganization Scheme, initiated in September of 1917, came to an end at the close of August 1919. The effect of the scheme, it will be remembered, was to overcome the congestion on the railways and the shortage of rolling stock consequent on the

War. Under it the country was divided into twenty areas, with the main idea that the consumption of coal should take place as near the point of production as possible, and so conduce to simplification of transport. It was estimated that a saving in transport of 700 million ton-miles would be secured and so reduce the congestion on the railways and liberate rolling stock.

Resignation of the Controller

In October Sir Evan Jones resigned the Controllershship, being succeeded by Mr. A. R. Duncan,¹ a solicitor of Glasgow. On the 27th of November the miners' representatives on the Controller's Advisory Board announced their resignation.²

¹ Now Sir Andrew Duncan.

² At the end of November the writer resigned his position as Technical Adviser to the Controller and head of the Production Branch, so that of the succeeding events he can only speak as an onlooker and not from inside knowledge.

CHAPTER XV

THE YEAR 1920

The Coal Mines (Emergency) Act. — The Mining Industry Act of 1920. — The Unemployment Insurance Act, 1920. — Course of Prices. — Output. — Export. — Wages. — The Strike in October. — Terms of Settlement.

Legislation

(a) *The Coal Mines (Emergency) Act.* The Coal Mines (Emergency) Act, 1920, received the Royal Assent on the 31st of March, and by Section 9 thereof it was provided that ‘subject to the provisions of Part I of the Second Schedule to this Act the agreement confirmed by the Coal Mines Control Agreement (Confirmation) Act, 1918, shall cease to have effect, and shall be deemed to have ceased to have had effect as from the first day of April nineteen hundred and nineteen, and that Act shall be repealed as from the same date’. This Act is reproduced in full in Appendix XII.

(b) *The Mining Industry Act.* See Appendix XIII. An Act to regulate the coal industry, to provide for the better administration of mines, and for other purposes connected with the industry was passed in August. Under this Act there was set up for the first time a separate Department of Mines. Hitherto, the administration of the Coal-mines Act, the Metalliferous Mines Regulation Act, and the Quarries Act had been vested in the Home Office, to which Office was attached the Mines Inspectorate. These duties passed in November to the new Mines Department, in which Department the Chief Inspector of Mines became the Director of Health and Safety. The new Department is a branch of the Board of Trade under a Parliamentary Secretary of the Board, who is known as the ‘Secretary of Mines’. It retains the few powers and duties of the Board of Trade in relation to mines and the mining industry. Not only are matters of health and safety dealt with by the new Department, but it exists also for the purpose of securing the most effective development and utilization of the mineral resources of the United Kingdom.

In it too were merged the powers and duties of the Coal Control Department for so long as it might be deemed advisable to exercise control of the industry.

The Act provided that 'the Coal Mines (Emergency) Act, 1920, shall continue in force until the date as from which the first order made under this section takes effect, or until the thirty-first day of August, nineteen hundred and twenty-one, whichever may be the earlier; and that Act shall have effect as if in section eleven thereof for the reference to the thirty-first day of August, nineteen hundred and twenty, there were substituted a reference to the date to which the Act is continued by this provision'. The sub-section of Section 3 of the Act is of importance inasmuch as the Government fully de-controlled the mines before the date named.

Part II of the Act relates to the regulation of coal-mines, and provides for the establishment of :

Pit Committees,
District Committees,
Area Boards, and
A National Board.

So far neither the owners nor the workmen have agreed to work Part II of the Act, and by Section 17 of the Act it is provided that 'if at the expiration of one year from the passing of this Act it appears to the Board of Trade that the scheme of this Part of the Act has been rendered abortive by reason of the failure on the part of those entitled to appoint representatives as members of the pit and district committees, area boards, and the National Board to avail themselves of such right, the Board of Trade shall issue a report of the circumstances, and that report shall be laid before Parliament, and at the expiration of thirty days during the session of Parliament from the date when it is so laid all the provisions of this Part of this Act shall cease to have effect unless in the meantime a resolution to the contrary is passed by both Houses of Parliament'.¹

Part III of the Act relates *inter alia* to schemes for drainage, power to make regulations with respect to metalliferous mines, the establishment of a fund for the improvement of social con-

¹ This was written in September 1921. For later developments see correspondence between Mining Association of Great Britain and the Minister of Mines, Cd. No. 1551.

ditions of colliery workers, and the repeal of the Price of Coal (Limitation) Act.

(c) *The Unemployment Insurance Act, 1920.* This Act, which became law on the 9th of August, arranges for insurance against unemployment, and is not confined to any one class, but is applicable to all workers. Every person entitled to benefit is to be paid in respect of each week or any continuous period of unemployment at the weekly rate of 15s. for men and 12s. for women; and for persons under the age of eighteen years, half the full rate. The amounts may be slightly increased or decreased within limits prescribed by the Act. The money required for providing unemployment benefit is derived from an unemployment fund established under the Act and formed partly from contributions by employed persons, partly by contributions by the employers of those persons, and partly from moneys provided by Parliament. This is sometimes spoken of as the 'Doles' Act, and it is argued by some that it has contributed to unemployment; that may be, but in the main it has been beneficial and has assisted in tiding over a difficult period in the history of this country.

Course of Prices

The course followed by the Government policy in respect of the price of coal was variable. Whereas in November 1919 heavy reductions were announced in respect of household and coastwise bunker coal in order, as the President of the Board of Trade (Sir Auckland Geddes) phrased it, to put the price of coal for inland consumption 'upon an economic basis', Sir Robert Horne (the new President of the Board of Trade), in the House of Commons on the 10th of May 1920, removed 10s. from the price of domestic coal (Coal Resolution Order, 1920) and put 4s. 2d. on all coal, so that the result was that there was an increase of 4s. 2d. on domestic coal and 14s. 2d. on industrial coal. As, however, the increases in the miners' wages were normally regulated by a sort of sliding scale based on the average selling price of coal, and the existing high rate of wages was being met out of the proceeds derivable from exported coal, at this time fetching very high prices, the term 'economic basis' seemed hardly warranted.

Output

That there had been a continuous fall in the output per man per shift during the years 1918, 1919, and 1920 was shown by some figures published in the autumn of the latter year. From these figures it was argued by mining experts that decrease in output follows automatically every advance in wages. Thus, taking the index number of 100 for the rate of output per 100 shifts worked in March 1915, the output per unit of labour at various dates subsequently was :

	<i>Wages increase</i>	<i>Output per unit of labour</i>
March 1915.	Regulations of Conciliation Boards practically dis-continued	100
September 1917.	First war wage	93·7
June 1918.	Second war wage	87·1
March 1919.	' Sankey ' wage	84·0
May 1920.	20 per cent. increase	77·4

Against this contention it might, on the other hand, be urged that (a) the war wages mentioned above were in the nature of flat rates ; (b) the hours of labour had been reduced following the ' Sankey ' Report, this reduction taking effect in July 1919 ; and (c) the men were later in the year 1920 awarded an increase in wages and the output considerably advanced. It was true, however, that this increase was made to depend upon an increase of output actually achieved before the increase of wages became operative. A higher standard of living on the part of the miners may do something to enhance output, but there is no doubt that in the future we shall have to depend increasingly upon engineering skill as opposed to manual effort to maintain the output per person employed, and upon coal-saving methods and appliances to reduce our fuel requirements.

Exports

The following changes took place during the year in regard to the export of coal :

An open general licence, with effect as from the 1st of January, was issued by the Board of Trade whereby export was permitted subject to the previous approval of each shipment by the Controller of Coal-mines or his representative, this approval being signified

by endorsement upon customs pre-entry forms, shipments for Russia and late enemy countries being for political reasons reserved for consideration at head-quarters. French and Italian authorizations were no longer required in support of applications, and no definite quantities of coal, &c., were reserved for individual countries. Eventually, however, as the output of coal continued to decline, the Controller deemed it necessary to allocate a definite, though a considerably reduced quantity, for export in respect of each district with fixed allocations; the total quantity being 1,150,000 tons per month—750,000 tons for France and 350,000 tons for Italy—taking effect as from the 7th of July, it being left to the District Supplies Committee to apportion to each colliery its share.

There were exported in the year 1920, 24,931,853 tons of coal, the value of which was £99,627,146. The figures for the year, given in quarterly periods for the first three quarters, were as follows :

	<i>March Quarter Tons</i>	<i>June Quarter Tons</i>	<i>September Quarter Tons</i>
Exports	8,365,769	6,065,764	5,420,049
	£	£	£
„	30,486,080	24,414,398	23,592,007
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Average f.o.b. prices . .	73 10·59	80 5·99	87 0·66

The coal shipped for the use of steamers engaged in the foreign trade amounted to 13,840,360 tons. The high price of exported coal was due to the great dearth of coal on the Continent, and the high prices exacted went to swell the pool and enabled the Control to meet its financial liabilities. There are many inland collieries which have no export trade ; many, if not the majority, of such collieries were working at a loss, but their guaranteed standard had to be met. The effect of these high prices has, however, undoubtedly been to leave a feeling of soreness on the part of many of our French and Italian customers. The f.o.b. price of exported coal began to decline towards the end of the year 1920, and for various reasons during the succeeding year continued to do so. For example, the Bureau des Charbons fixed the maximum prices which could be paid for British coals imported

into France at figures considerably below current values ; in some cases the new maxima were as much as 40s. below the rate current in early December, and 30s. per ton below prices at which contracts had been made for delivery in 1921. France could afford to do this because of the coal supplies she began to obtain from Germany under treaty, and from the United States, and from her own mines which had been rendered non-productive by the War, but which were gradually being restored and were contributing to her supplies. The production of the Belgian mines was advancing also. Belgium before the War used to compete with us for French railway coal contracts.

Writing on this subject in January 1921,¹ the author embarked on prophecy, and in view of the fact that the predictions then made have been realized, he ventures to reproduce his words. He said :

‘ It is probable, therefore, that there are some lean months ahead, amounting it may be to 12 or more ; but recuperation is one of the first necessities of the whole of Europe, and the exhaustion from which all recent belligerents are suffering must lead to a period of great effort. That depression will characterize the coal trade in the present year appears certain, but it is equally certain that this period of depression will be succeeded by a period of activity. Coal-mining is the key industry of Great Britain, for in order that industry generally may flourish cheap fuel is essential. It is probable that the two factors which have conduced more than any others to the present decline in manufacturing power of industry are the temporarily exhausted purchasing power of the nations and the high price of fuel.’

Labour and Wages

The incidents characterizing the year 1920, in so far as the labour situation in coal-mines was concerned, may be regarded as the aftermath of the ‘ Sankey ’ Commission. The carrying into effect of the recommendations contained in the first Sankey Report caused, as all reorganization must of necessity cause, a certain amount of disruption in system and routine which required time for adjustment. Added to this, owing to the return to the mines from the military and naval forces of large numbers of demobilized ex-miners, many of them debilitated by reason of wounds, illness,

¹ Engineering Supplement of *The Times*, January 1921.

and long abstinence from heavy manual labour, and owing to the backward state of development of the mines inherent to war conditions, overcrowding of the mines existed in many districts during the year. While this overcrowding certainly contributed towards a fall in the output per man per shift, it did not, as has been shown, entirely account for it. It is not possible clearly to compare the average wages of the different grades of labour employed in and at coal-mines. These grades are various and many. The figures have never been taken out, for the work employed in so doing would be immense, though the result might be useful and illuminating. But some idea of the earnings of miners in the mass may be obtained from the answer of the Secretary of Mines (Mr. Bridgeman) to a question addressed to the President of the Board of Trade in the House of Commons in October 1920. From the answer it appears that the average weekly wage paid before the strike in October to men, women, and boys engaged in the industry, on the basis of five days per week and seven hours per day, was 82s. 7d. In addition, the miners had also the benefit of cheap or free house coal in many districts. Mr. Bridgeman stated that, in the absence of information as to the market value of coal of the kind supplied to the miners, an exact monetary allowance in respect thereof could not be made, but that it probably amounted to about 2s. 6d. per week per person. The coal supplied to miners (taking the 1919 figures) was 6,322,000 tons, of which 2,886,000 tons were supplied free of cost, and 3,436,000 tons were supplied at a total cost of £1,360,000. During the first half of 1920 the amount of coal delivered in the same way was 3,429,000 tons, including 1,532,000 tons supplied free of cost and 1,897,000 tons supplied at a total cost of £782,000. It was estimated that the advantage to the miners was represented by a sum of more than £8,000,000 per annum at the time the answer was given. In addition, it should be remarked that the married miners of Northumberland and Durham and some few other parts are provided with a house free of rent, or, in lieu thereof, with an agreed sum per week.

The National Strike in October

In April the miners had been awarded a 20 per cent. advance on gross earnings, excluding war wage and 'Sankey' wage. In August they put forward a demand for (a) a reduction of 14s. 2d. per ton in the price of household coal, and (b) an advance of 2s. per shift for members of the Miners' Federation of 18 years and upwards, with a corresponding advance for boys. As the

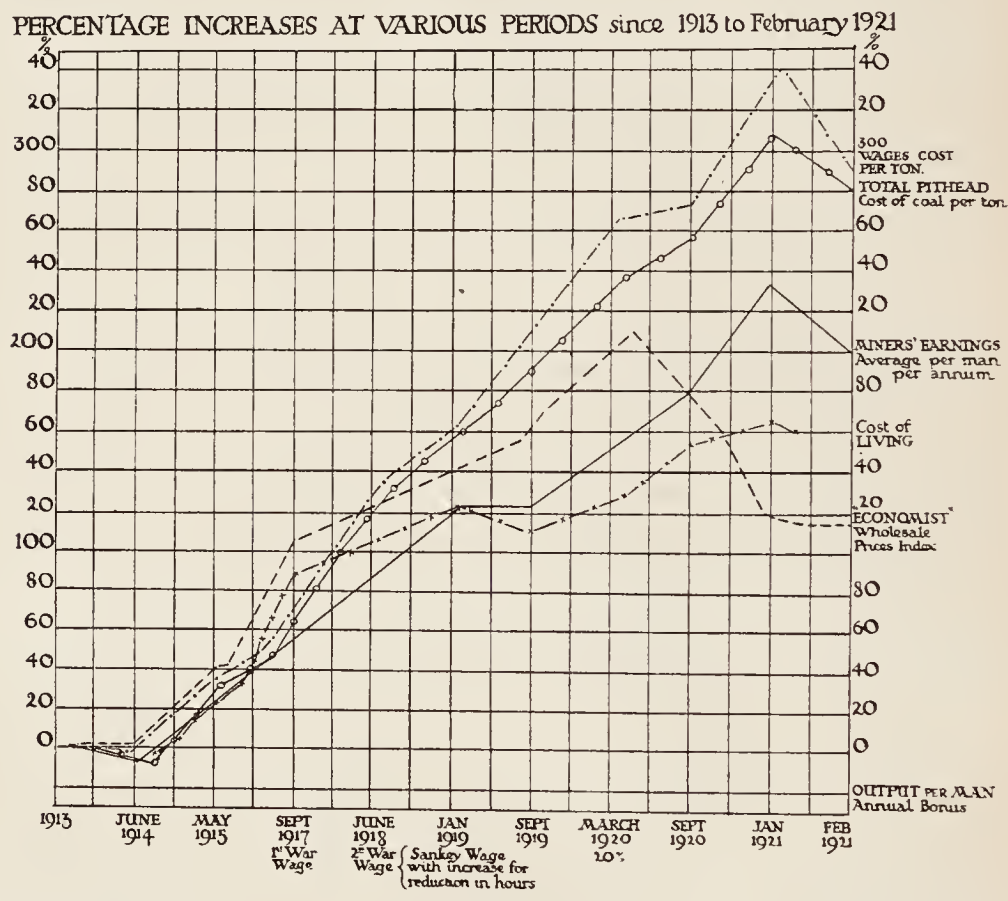


FIGURE 4.

control of the industry was still in the hands of the Government, the application was addressed to the Government, who declined to accede to it. Briefly stated, their reasons for refusing the demand were: (a) that the home consumer was getting the coal at or below cost price; (b) that the existing adventitious profit on export coal, which the miners wished to see distributed, rightly belonged to the country as a whole and should benefit the country

as a whole through the Exchequer ; and (c) that in view of (a) and (b), any advance in wages should be contingent upon an advance in coal production. Eventually the miners dropped the claim for a reduction in the price of domestic coal, but persisted in their demand for an increase of wages. The Government then brought about a meeting of the representatives of the coal-owners and the miners, when various suggestions as to a *modus vivendi* were discussed, chiefly in relation to the establishment of a datum line from which an advance in output was to be calculated. Agreement was not, however, arrived at, and negotiations having broken down a national strike was declared and became operative from Monday, the 22nd of October. About this time figures were put forward by the Coal-owners' Association, stating that whereas the cost of living had increased 152 per cent., the miners' wages had advanced 157 per cent. as compared with pre-war figures. In this connexion the diagram shown by fig. 4, prepared by the Association (for permission to reproduce which I am indebted to the kindness of the late Chairman of the Association, Mr. Evan Williams), is of peculiar interest, showing, as it does, the variation in wages, cost of living, and price of coal over the whole of the war period and inclusive of the years 1919 and 1920.

Terms of Settlement

The Government subsequently again took up the running, and finally, on the 28th of October, the representatives of the Miners' Federation agreed to put before the miners, and to advocate the acceptance by them of, a provisional settlement, the terms of which may be epitomized as follows :

1. An advance of wages of 2s. per shift for persons over 18 years of age, 1s. per shift for persons between 16 and 18 years of age, and 9d. per shift for persons below 16 years of age, to be paid as and from the date of resumption of work. This advance to be guaranteed by the Government until the 31st December 1920, in any event.

2. Wages in January to be the same as wages in December, if the value of export sales exceeds the value of export sales for the September quarter by a sum sufficient to cover the full

wage advance, the period to be taken for regulating the January wage to be the five weeks ending the 18th December 1920.

3. If the value from export sales during the above period over the September value is less than the amount required to continue the advance in January, then for every £288,000 less than the amount required a reduction of 6*d.*, 3*d.*, and 2¼*d.* per day for adults, youths, and young persons respectively will take place on the 3rd January 1921.

The following table shows the increases of wages payable under this temporary scheme as and from the 3rd January 1921, in accordance with the output and increased values arising therefrom :

<i>When yearly output less than million tons</i>	<i>When yearly output not exceeding million tons</i>	<i>Increased values per week</i>	<i>Increase of wages per day s. d.</i>
238	242	zero	1 0
242	246	288,000	1 6
246	250	576,000	2 0
250	254	864,000	2 6
254	258	1,152,000	3 0
258	262	1,440,000	3 6
262	266	1,728,000	4 0

For every 6*d.* reduction in wages the owners would lose a quarter of the amount of their profits over and above the profits guaranteed to them under the Coal-mines (Emergency) Act. Similarly for every advance of 6*d.* per shift in wages the owners' profits in excess of their guaranteed profits would be increased to one-quarter. The Government guaranteed export prices at the figure of 72*s.* per ton, whether they rose or fell below that figure.

The scheme was temporary in character and was to continue only until a National Wages Board was established ; and owners and workmen had to report to the Government on the permanent scheme not later than the 31st March 1921.

Though the proposals were not adopted by the miners in their ballot, the majority being under two-thirds (as a matter of fact the majority against acceptance was only 8,459), the strike was declared off on the 3rd of November, and a general resumption of work took place as early thereafter as possible.

But practically a fortnight's output was lost to the nation, many large manufacturing works had to stop work for lack of fuel, the train service was curtailed, and much inconvenience was caused. While the strike inflicted serious loss upon the workers in other industries, and dealt a heavy blow to British trade, it severely penalized the coal-miners themselves. It was estimated that the actual loss to the coal-miners was £15,000,000 in respect of loss of wages, while the strike pay depleted the funds of the various District Associations to the extent of £2,000,000. The loss in output of coal was probably about 14,100,000 tons.

The two most important points which emerged from the settlement were: (1) The basis of the wage increase was increased output, which was what the Government was striving for; and (2), a National Wages Board for the settlement of miners' wages would, it was hoped, be established. Before the period of Government control wages were dealt with by District Boards, but certain of the miners' leaders had for some time been urging national settlement of wages in preference to district settlement. The arguments advanced against national settlement are difference of conditions in respect of occurrence of the coal, working practice, division of labour and systems of payment, and also the variations that exist in respect of the relative profit-earning capacity of different districts and differences in regard to trade conditions generally. To some extent, some of these differences exist within the area of a given coal-field; the matter was rather one of degree than of principle, but there could be no doubt that settlement on national lines would be a serious matter for the less profitable coal-fields, a disability which the collier would share with the coal-owner.

CHAPTER XVI

THE YEAR 1921

De-control. — The Great National Strike of Miners. — Terms of Settlement. — A Working Arrangement at last. — Conclusion.

De-control of Prices

THE decision to de-control the prices and distribution of inland coal was made on the 1st of February and was to take effect at the end of that month, buyers and sellers being free on and from the 1st of March to make their own arrangements.

The decision was announced in the following statement issued by the Mines Department :

The grounds upon which the control of the distribution of coal and the regulation of pit-head prices have been maintained down to the present time were :

1. That owing to the shortage of output and the necessity of an adequate supply of coal to consumers in the United Kingdom, it was essential to restrict the amount which could be exported, and

2. That the disparity between the world's price of coal and the price which the Government thought it reasonable for home consumers to pay was so great that it was incumbent upon the Government to regulate pit-head prices in the United Kingdom.

These reasons have now ceased to operate. The increased output of coal, combined with slackened demands both from home industries and from foreign countries, has removed the risks of a short supply within the United Kingdom, and the export price has now come so close to the home price—in some cases even below—that there is no longer any ground for restricting the price at which coal may be sold.

The Government has accordingly decided to cancel on and from March 1st next the directions of the Board of Trade dated August 25th, 1920, as to pit-head prices. This will afford a month in which buyers and sellers can readjust their arrangement so far as these may be necessary.

Further, all allocations or directions to collieries to supply specified districts or consumers, whether made by instruction of the Government or by district coal and coke supplies committees, will be abolished from the above date, and inland consumers will thereupon be free to purchase supplies from any available source and through any channel. They should, therefore, at once proceed to make any arrangements necessary to secure their supplies after March 1st. All questions as to price, quality, con-

ditions of sale and delivery, &c., will be matters for arrangement directly between buyers and sellers.

So far as coal for foreign bunkers and export is concerned, the position remains as shown in the official notifications published on December 28th, 1920, and January 10th, 1921.

In accordance with the directions of 28th December 1920 restrictions respecting the sources from which bunker coal for the Mersey should be taken were withdrawn, and a certain amount of large coal was permitted to be used at the Humber ports for bunkers and export. On the 10th January 1921 discretion was given to certain district committees to allow exports of coal, coke, and patent fuel, freely, subject to inland needs being met. All restrictions on bunkering were withdrawn by the same Order.

It will be remembered to what a high figure the price for export and bunker coal had reached in 1920, the unprecedented level of 120s. per ton being realized at the Bristol Channel ports and 150s. at Newcastle. By December South Wales best Admiralty steam coal had fallen to 75s., and the quotation at the beginning of February was 57s. 6d. per ton.

Financial De-control

Late in February the President of the Board of Trade (Sir Robert Horne) announced to the Executive of the Miners' Federation the Government's intention of financially de-controlling the coal-mining industry on the 31st of March. The Executive of the Miners' Federation expressed very strongly their dissatisfaction with this decision, and begged that the financial control should not cease before the 31st of August, the time originally fixed. The coal-owners too, as a body, were opposed to the cessation of financial control by the Government at the date proposed, and their point of view was ably voiced by a prominent Scotch coal-owner, Sir Adam Nimmo, in a letter he addressed to the *Glasgow Herald* late in February. He argued that under Government control a situation had been brought about for which the Government had been directly responsible, and which could not be removed by a mere arbitrary action on their part ending the Control on the 31st of March. He stated that it was unreasonable that the Government should put

the owners in such a position as to incur all the odium of reducing wages, for which they had been in no way responsible, but which had been imposed upon the industry by governmental action during control. He was of the opinion also that the Government had to justify any action taken by them which interfered with the conditions laid down in the Coal-mines Emergency Act, which Act ran on until the 31st August 1921, unless it was extended by resolution of Parliament.

The case for the Government was skilfully presented by the Secretary of Mines (Mr. Bridgeman) when moving the second reading of the Coal-mines De-control Bill in the House of Commons on the 8th of March. He thought the vast majority of the House would agree with him that control by the Government of any industry was 'a thoroughly abominable thing'. The view of the Government had always been that since the War the only real justification for keeping on control was that the difference between the world price of coal and the cost of production at home was so great that without control the coal trade would be tempted to send an abnormal quantity of coal abroad and home industries would have to pay the full world price in order to get the coal they required. After the cessation of hostilities the only reason for continuing control was the difference between world prices and the cost of production at home. The moment had arrived when the reason had gone. On the point of the accusation that the Government were committing a breach of faith in asking Parliament to repeal the original Act and to change the date of the termination of control from the 31st of August to the 31st of March, he asked : 'A breach of faith with whom? Was it with the owners, who did nothing but clamour to have an earlier date than August 31st, or was it with the miners, who had absolutely boycotted the Act and had refused to work it?' He considered the possible alternatives to de-control. The time was not ripe for nationalization, to raise the price of coal at the present time of great trade depression would be absolutely fatal, and even if prices were raised it was very doubtful whether they could be realized. And finally, another alternative which had been put forward, that of a subsidy from the Exchequer, was impracticable. It would mean at least five millions sterling a month between the 31st of March and the

31st of August, and the adoption of such a course would mean that the taxpayers would have to contribute towards the carrying on of an industry in which they had not invested.

The position was therefore that the owners and the miners were in their own interests opposed to de-control. The miners offered a determined resistance, the owners accepted de-control under protest. It has been said of the owners, that so long as the trade was making money they clamoured for de-control, but that when it was losing money they changed their minds. But this is not fair criticism, for they were greatly divided on the subject of de-control at and about the time of the Armistice; in fact the majority were against immediate de-control, and that was a time of high prices.

On the 4th of July an Order of the Board of Trade removed coal, coke, and patent fuel from the list of prohibited export goods under the Customs Act, and the export of coal was definitely de-controlled.

Attempted Adjustment of Wages

The position of the coal-mining industry in respect of wages and de-control from the coal-owners' point of view was clearly and forcibly put by Mr. Evan Williams, the President of the Mining Association of Great Britain, in a statement which he made early in March on behalf of the coal-owners.

It will be remembered that when the strike of October of the previous year was settled the obligation was imposed upon the coal-owners and workmen to evolve a scheme for the adjustment of wages in the industry. The owners stated, through Mr. Williams, that wages accounted for nearly 80 per cent. of the cost of producing coal, and that in order to establish the place of the British coal-mining industry in the markets of the world the wage difficulty must be solved. 'To keep our ships supplied with outward cargoes and to reap the benefit of cheaper food imports for our country, we of the coal trade must get wages right' were the words used. After the strike the two parties got together and beat out certain main and guiding principles, agreeing that :

1. Wages must conform to the capacity of the industry to pay them.

2. The receipt of a standard wage should justify a corresponding minimum profit to the colliery undertakings ; and
3. Any surplus remaining after these, and of course the usual working costs, should be divided between the men and the owners in agreed proportions, the work-people's share to be an addition to their standard wages.
4. Joint audits of the owners' books by accountants representing each side shall be made to ascertain all the data necessary for the periodical determination of wages.

From the workmen's point of view this constituted a great advance on previous basic methods of determining the rise and fall of their wages, for in times gone by it was customary to regulate wages by the selling price of coal, the miner being concerned only with the selling price. Costs did not come within his cognizance. Under the new proposed basis of settlement both costs and prices were to be considered.

So far there was agreement, but they broke away on other serious matters of principle, the more important being that whereas the miners wanted to have the whole industry financially unified under a National Wages Board, receipts to be pooled over the whole so that rich districts would subsidize the poor ones, the owners on the other hand would not contemplate this and proposed an arrangement of District Boards.

Towards the close of March the owners reported to the Government that whilst a large measure of agreement appeared to exist upon general lines of a wages scheme, there were 'irreconcilable differences upon two fundamental points which are inseparable : a national settlement of wages and a national pool of profits'. Such was the position towards the close of the month of March. The fall in trade had continued during the months of January and February, and on the 23rd of March the statistical summary relating to output, costs, proceeds, and production during January and February was issued by the Mines Department, which was as follows :

The total loss on the mines showed a reduction from £4,889,331 in

January to £4,536,396 in February. Wages had dropped from £27,046,305 to £22,223,764, and the output in terms of tonnage disposable commercially—that is, less mine consumption and miners' coal—had dropped from 17,126,537 tons to 15,168,420 tons.

Other comparisons were as follows :

	<i>January</i>	<i>February</i>
	£	£
Royalties	556,425	504,093
Net costs of production	34,468,733	29,399,164
Proceeds of commercial disposals	29,579,402	24,862,768
Number of workpeople employed	1,224,486	1,218,798
Tonnage raised per person employed	15·72	14·05
	£ s. d.	£ s. d.
Earnings per person employed	22 1 9	18 4 8

Figures of tonnage shipped for export and foreign bunkers, mainly from South Wales and Monmouthshire, Northumberland, and Durham, showed a slight increase over January from 2,741,714 tons to 2,767,880 tons.

The district figures displayed considerable variation in the amount of earnings per person employed, as well as in other respects : South Wales miners' earnings, for instance, dropped from £23 9s. 10d. to £17 19s. 1d., while in Scotland the decrease was only from £22 7s. 4d. to £20 17s.

The events which followed the breakdown of negotiations between the coal-owners and workmen are given below in sequence.

On the 1st of April a national strike of the coal-miners took place.

On the 26th of April a conference took place between the Government representatives, the Central Committee of the Mining Association, and the Executive Committee of the Miners' Federation, under the Chairmanship of the President of the Board of Trade (Sir Robert Horne), when it was arranged that a further conference should take place, and that Sir R. Horne would confer separately with the owners' and workmen's representatives and discuss with them the question of the amount of assistance the Government could give towards lessening the reduction in wages required to make up the deficiency between the cost of production and the amount realized by sales according to the returns for March. The coal trade had been steadily going downhill. Without taking into account any allowance for profit, interest on loans, or depreciation, the dead loss in March was £5,259,209, which divided by the

tonnage was at the rate of 6s. 10d. per ton. The cost of production was at the rate of 39s. 1d. per ton, of which sum wages accounted for 27s. 9d. The average receipts from sales worked out at 32s. 1d. per ton. The difference was therefore 7s. per ton, the odd 2d. being due to miners' coal or some subsidiary item.

The miners had offered to accept a reduction of 2s. per shift, but it was quite evident that this would not go very far towards meeting the discrepancy of 6s. 10d. per ton.

Difficulties arose towards the end of April between the miners and the other parties to the 'Triple Alliance', largely due to a misunderstanding. The miners regarded themselves as having been deserted by their railway and transport friends in that the latter did not strike in support of the miners, and in some quarters rather bitter feelings were engendered and the miners decided to leave the Alliance.

On the 28th of April the Government, who had previously offered a subsidy of $7\frac{1}{2}$ millions towards lessening the reduction of wages, increased the offer by $2\frac{1}{2}$ millions. The proposals, in a summarized form, were as follows :

A grant of £10,000,000.

No greater reduction in wages during May than 3s. per shift, or in June than 3s. 6d.

The remainder of the Government grant, after these safeguards were provided for, to be applied to improvement in July (two-thirds) and August (one-third) of the wage conditions in the districts most requiring it.

The Government to facilitate, if the miners so decide, the operation of the grant so that the reduction in all districts would be uniform.

In that case, in some districts the miner would receive less than the owner would be willing to give.

The owners had consented to the collection by the Government of surplus wages in such districts, and their distribution in the districts more hardly hit.

The proposals of the Government to be dependent on the condition that a durable settlement should be made which would last one year from the end of the temporary settlement and afterwards be terminable on three months' notice from either side.

The national pool the Government regarded as a political issue involving legislation.

This offer was reported to the delegates by the Executive, but was rejected in the following terms: 'that this Conference rejects the Government's proposals, as they do not concede the fundamental principles of a National Wages Board and a National Pool, for which we stand.'

On the 29th of May the Prime Minister, together with the Chancellor of the Exchequer (Sir Robert Horne, lately the President of the Board of Trade), with the President of the Board of Trade and the Minister of Labour, met the representatives of the owners and miners, when the following proposals from the Government were handed to them:

It is proposed that there should be a temporary arrangement leading up to a permanent scheme.

Temporary Arrangement

During this period it is proposed that there should be a gradual scaling down of the wages until they reach the economic level which the industry is capable of sustaining.

The length of this period depends upon:

(a) The amount available from external sources for making up the difference between the economic capacity of the mines and the actual payment of wages.

(b) The amount of reduction immediately made in the wages. If the reduction is a slight one it is obvious that the sum available will soon be exhausted. If, on the contrary, it is substantial, then the sum available for covering the deficiency will last much longer.

The Sums available for Covering the Deficiency

1. A grant of £10,000,000 from the Exchequer.

2. The surrender by the owners of the right to take out of the industry those sums which in the scheme adopted by the miners and mine-owners would be attributed to the owners as standard profits for a period of three months in the districts in which Government assistance is being required.

The Government grant will not be given until arrangements for a continuing agreement have been arrived at between the parties.

Permanent Scheme

As it is plain that the parties are unable to agree upon the terms of the arrangement for a continued period, the matter in controversy must be decided by one of the three following methods:

1. That a National Wage Board should be set up, composed of equal

numbers of representatives of the coal-owners and miners, over which a neutral chairman, with a casting vote, should preside.

2. That a Tribunal of three persons should be established to decide the matters at issue.

3. That the question in dispute should be referred to a single arbitrator.

The decision of the body or person selected should be binding upon both for a period of 12 months, and thereafter subject to three months' notice upon either side.

The determining body shall decide :

(a) The wage to be paid at the end of the temporary period.

In arriving at a decision upon this question regard should be had to :

(1) The capacity of the industry in each district to pay.

(2) The provision of a subsistence wage to the lowest paid worker.

(3) The possibilities of increasing output.

(b) The amount of the minimum standard wage in each district.

(c) The proportion of profits to wages in the distribution of the proceeds of the industry.

The determining body must report within two months.

The parties agreed to consider the proposals and report to the Government. On the 4th of June the Government placed a time limit of a fortnight on its offer of £10,000,000 subsidy.

On the 6th of June the colliery owners and miners' representatives met in conference, and again on the 7th of June, when the miners' leaders decided to recommend the miners to ballot on the owners' proposals.

On the 17th of June the result of the ballot was declared, showing a majority of 248,684 on a total vote of 616,338 for the rejection of the owners' and Government's terms.

On the 18th of June the Prime Minister informed the Miners' Executive that the offer of the grant of £10,000,000 had expired, and the miners decided to seek joint national action with other organizations of labour, but on the 23rd of June the Amalgamated Engineering Union and the Transport Workers' Federation declined to attend a conference which had been called by the Miners' Federation with a view to securing joint action.

The next day the Miners' Executive approached the Government and the owners with the object of bringing about a conference to discuss the situation and, if possible, of ending the dispute. The next day conferences of the colliery owners and miners were

held at the Board of Trade and a provisional agreement arrived at. The final terms of an agreement between the colliery owners and the miners were settled, the Miners' Federation issuing a statement urging acceptance and a return to work on the 4th of July.

So ended the greatest and most disastrous stoppage in the history of British coal-mining, for the whole of the coal trade was at a standstill for thirteen weeks and four days.

Under a leading article entitled 'England, Wake up!' *The Times* commented in biting terms on the circumstances of the strike.

'Yesterday', it said, 'the Government, the Mining Association, and the Miners' Federation were pleased to compose the quarrel which has for three months laid the coal-fields of Great Britain idle. . . . The economic condition of the country had never in its history more imperatively demanded industrial peace than at the moment chosen for the greatest dispute on record. With our finances embarrassed beyond precedent, our credit tottering, our markets vanishing and unemployment increasing every day, we were visibly slipping down into a morass, from which the only way of escape was by strenuous and steady work. This was the moment chosen to bring to a complete stop the industry on which all others more or less depend. . . . Attempts have been made to estimate the money loss, but it is impossible to do so with accuracy. The bill runs into hundreds of millions one way and another. . . . England must wake up and work for very life.'

The Terms of Settlement provided for a distribution of the proceeds of the industry (after deducting costs of production such as timber, stores and materials, administrative expenses, &c.) between wages and profits in agreed proportions, but in order to prevent too sudden a fall in wages it was agreed that during a temporary period of three months ending on the 30th September 1921, the fall in wages should not exceed a certain amount each month, and that the Government should make up, out of a grant not exceeding £10,000,000, the difference between the amount which would have been payable in wages under the normal operation of the scheme and the amount payable under the special provisions relating to the temporary period.

The scheme for the division of the proceeds of the industry operates as follows :

1. In each district forming a unit for the ascertainment of wages, the collieries make returns of their working results over a given period, and the returns of all the collieries in the district are aggregated.
2. From the aggregate wages bill is deduced the amount of 'standard wages', i.e. the existing basis rates plus the percentages which were payable on basis rates in July 1914.
3. Seventeen per cent. of the amount of standard wages constitutes the standard profits of the owners.
4. After deducting from the gross proceeds the standard wages, the standard profits, and the costs of production other than wages, the surplus is divisible in the proportion of 83 per cent. to wages and 17 per cent. to profits.
5. The standard wages and the share of the surplus apportioned to wages are added together. The sum thus obtained is expressed as a percentage on basis rates, and this percentage constitutes the rate of wages payable during the next period.
6. In no case can wages fall below a point 20 per cent. above the standard wages.
7. If the rate of wages does not provide a subsistence wage to low-paid day wagemen, the scheme provides for the making of such allowances per shift worked to the daily wages of these workers as may be necessary for this purpose.
8. If in any period the proceeds, after deduction of costs other than wages and the cost of the standard wages, prove to have been insufficient to meet the standard profits, the deficiency is carried forward as a first charge to be met out of any surplus in subsequent periods.

It should be understood that aggregation of the working results of the collieries in a district is merely a calculation for the purpose of determining the general wage rate during the succeeding period, and that there is nothing in the nature of a pool.

The following example illustrates the working of the arrangement :

Suppose the proceeds at the pit head to be £500,000.

	£	£
<i>Standard wages :</i>		
Total wages paid at basis, plus percentage (45·5 per cent.) .	291,000	
Standard wages $\frac{110}{145\cdot5}$ thereof (being basis, plus 10 per cent., as		
in July 1914)	220,000	
<i>Costs of production other than wages</i>	150,000	
Standard profits 17 per cent. of standard wages	37,000	
		<u>407,000</u>
<i>Surplus</i> ascertained in terms of Clause 4 of Terms of Settlement .		93,000
<i>Owners' 17 per cent.</i> thereof		<u>15,810</u>
83 per cent. thereof applicable to wages (i. e. of £93,000)		77,190

The total amount available for the payment of wages on the basis of the ascertainment will accordingly be

£220,000 plus £77,190, or £297,190,

which represents 48·59 per cent. on basis wages.

Two points of criticism have been advanced against the settlement :

The first is that it will hit hardly the poorer collieries in a given district, since the surplus out of which wages above the standard wages are payable may have come from one or two of the rich collieries in a district only, with the result that the other collieries are mulcted in a higher rate of wages than would be justified by their own working results. This, however, is clearly a necessary consequence of any scheme which establishes a general wage rate for a district, such, for example, as the old system of basing wages on selling prices, and the only remedy would be an arrangement under which the colliery was the unit for wage-fixing purposes.

The second criticism is that the coal-mining industry as an investment for capital is rendered less attractive by reason of the fact that whereas in the past large returns have been reaped in abnormally good times, this will not obtain in the future to anything like the same extent.

The reply that has been advanced to meet this criticism is

that the estimated return to capital under the scheme is based on such information as is available as to average profits in the coal-mining industry over a long period.

Whether in both of these respects, i.e. the relative position of richer and poorer collieries and the average return to capital over a long period, the arguments which have been advanced against the scheme have or have not a good foundation time alone will show. On the other hand, if peace is secured in the industry and the settlement conduces to harmonious relations between the colliery owners and the workmen, a great end will have been achieved.

The settlement was to be binding until the 30th September 1922, and thereafter to be subject to three months' notice on either side.

In August the National Board, of which Sir William Plender is the Independent Chairman, issued its decisions respecting the interpretation of certain expressions and principles, e.g. 'proceeds', 'standard wages', costs of production other than wages, necessary for the guidance of the districts.

GENERAL SURVEY OF THE COAL-MINING INDUSTRY OF THE UNITED KINGDOM DURING THE PERIOD 1914-21

WHEN the general economic history of the period covered by the War and of the years immediately succeeding comes to be written, the writer thereof will have to take due note of all the varying forces which were at work shaping and controlling the industrial activities of the countries affected by the War. He will have to stand apart in order correctly to estimate the relative significance and effect of events. He will have to consider how one industry was affected by changes in other related industries; how, the upsetting of the laws of supply and demand, the derangement of land transport, the shortage of ships, and the constant drain upon the man power of a country, all of which are incidental to a state of war, rendered artificial methods of conducting industry possible and in some cases imperative. Having studied these and other cognate matters he may then hope to be in a posi-

tion to present to the mind of the political student an accurate composite picture of the industrial situation of the time.

Of all the industries that contributed to the successful issue of the War, perhaps the most important was the coal-mining industry. It is quite clear that without an adequate supply of coal for the manufacture of munitions it would have been impossible to have brought the War to a successful conclusion.

It would be extremely difficult to compress within the scope of an essay all the happenings in this great industry, and to present them to the reader in such form as to give him, as it were, a picture of coal-mining during the period under review. The only procedure to adopt, as I see it, is to record events as far as possible in chronological order and comment on them, where comment appears to be necessary, as they are recorded. That is the course which has been followed in this work.

There existed for some considerable time after the outbreak of war no definite system of control of the coal industry ; such control as was ultimately established was the result of a process of evolution. The completed system may be likened to a house that is constantly being added to to meet the increasing needs of an ever-expanding family, room being added to room, as necessity demands, on no preconceived architectural plan, with the result that, while the earlier stages of construction gave little indication of the eventual structure, the completed building differs materially from what it would have been had all the requirements been known at the commencement of the operations and the house constructed on a preconceived and definite plan.

What first rendered necessary some organization of the coal-mining industry was the great efflux of men from the mines to join the fighting forces almost immediately upon the outbreak of war and for many months successive thereto. The need for men in the army was urgent ; but urgent, too, was the need for men in the mines. There were at this time over 1,000,000 work-people employed above and below ground at the collieries. Up to the end of March 1916 there had flocked, voluntarily, to the army 282,200 men, the very pick of the man power of the mining industry, and even when it was found necessary to take steps to prevent more men from leaving the mines, leakage continued.

Under the Conscription Act certain classes of workmen were protected against enlistment—the coal-mining industry was what was known as a ‘protected’ industry; but at various periods drafts of recruits had to be supplied to the army, dire as was the necessity of the coal-mines from the point of view of coal production. In the aggregate the number of men drawn from the coal-mines for the army over the whole of the War period was not far short of half a million.

Although the vacancies in the mines occasioned by recruitment for the fighting forces were to some extent met by the natural influx of boys from the miners’ families and by the employment of persons who were above military age or were exempt from service for other reasons, the man power of the mines decreased considerably, a fact markedly reflected in the decrease of output. Yet, as is shown in this work, appeals to the patriotism of the workers in the mines did in the earlier part of the War result, for a short time, in an output per person employed at the mines in advance of the pre-war figure, a fact remarkable in view of the high proportion of young able-bodied men who had joined the army.

Considering all things, the recruitment of miners for the army when conscription took the place of the voluntary system worked well and smoothly, which was all the more remarkable in view of the peculiar psychology of the miner, for there is no more independent section of the British public than the miners. For generations they have lived largely apart from other communities; the very nature and situation of their work shuts them off in great measure from association with other classes. There is inbred in them a repugnance to change as applied to their habits and customs evolved through centuries, and they fiercely resent any interference with them and in the conduct of their work. They have for long been used to the settlement of disputes between themselves and their employers through the medium of Committees to which they elect members, and I am convinced that the harmony which prevailed in respect of recruitment was largely, if not entirely, due to the fact that they were represented on the District Recruiting Courts, and also on the Central Recruiting Court, which constituted a final court of appeal.

It soon became obvious that if the coal-mining industry was to be carried on in such a way as to meet the necessities of the country, to support the existence of an export trade in coal and at the same time to permit a more or less continuous supply of men from the mines for the fighting forces, then some organizing and supervisory body would have to be set up to keep in close touch with the industry so as to be in a position to advise H.M. Government should necessity arise. Such a body was the 'Coal-mining Organization Committee', established by the Home Secretary at the instance of the Cabinet in February 1915, a body composed of representatives of the coal-owners and workmen, with a neutral chairman. It was not clothed with plenary powers ; it could only investigate, report, and arbitrate. It watched the situation from day to day, making suggestions to the Government, bringing employers and employed together before disputes between them reached an acrimonious stage, issuing appeals for more regular attendance at work, organizing national meetings of employers and employed with the object of securing an increase in output, establishing colliery Committees with the same object, and acting as a Central Colliery Recruiting Court. The basis of all its activities was harmonious co-operation between employers and employees for the good of the nation and of the industry. And subsequent events fully justified the establishment of this Committee.

The work of the Committee, it will be seen, was far removed from control of the industry ; and it is conceivable that had it not been for the very strained relations between coal-owners and workmen in South Wales, culminating towards the close of 1916 in an actual impasse, the industry might have been carried on throughout the War through the agency of the three coal Committees which were in existence during the period 1915-17, viz. the Coal-mining Organization Committee and its two children—the Coal Exports Committee and the Coal and Coke Distribution Committee—the first dealing with the production branch of the industry, the second with the export of coal, and the last with the inland distribution and apportionment of coal to home consumers.

In its early days the Coal-mining Organization Committee had seen the necessity for the setting up of two organizations to

deal respectively with export and distribution so as to complete the cycle of operations. Ultimately, with the object of preventing overlapping of functions, Lord Milner was appointed supervisor. Had it been possible, and but for the impasse in South Wales it might have been possible, for these Committees to have continued to function without resorting to financial control of the industry, the nation would have been saved great expense and spared the painful process of de-control. But in the circumstances it was not possible.

Apart from the questions of man power and the direct means to be taken for the maintenance of output—notably in the reduction of ‘absenteeism’—there soon loomed upon the industrial horizon the prospect of a shortage of material necessary for carrying on the collieries, particularly in respect of mine timber, the consumption of which in normal times amounts to about three and a half million tons per annum. Later the supply of iron and steel, machinery and plant generally, and of electrical machinery and plant in particular, began to fail. These shortages became matters of the utmost urgency, greatly complicating the position. The way in which these difficulties were met and in large measure surmounted is described in detail in the pages of this work. Had greater attention been given in the past to the subject of home forestry, the task of the Coal-mining Organization Committee, and later of the Controller of Coal-mines and the Controller of Timber Supplies, would have been considerably lightened, and the problem of supply more satisfactorily solved. As it was, all that could be done was to make the best of things as they were.

Another matter of growing importance was that of economy in the use of coal. Nothing is more difficult to impress upon individuals altogether unused to restriction than the necessity for practising economy, and this is perhaps more true of coal than most things. Coal has, generally speaking, been very cheap in the United Kingdom, and the supply ample. We have consequently been somewhat reckless in our use of this fuel. The prices, by reason of the Price of Coal (Limitation) Act, were prevented from soaring, but the supply was limited; economy was preached broadcast but not practised; unessential industries were not rationed,

and in this, I think, an error was committed. Unessential industries should have been defined and strictly rationed, as also all forms of luxury in use (e.g. hot-houses). This could not have been carried out under the powers conferred upon the Committees; but the necessary powers could, of course, have been taken (such powers were ultimately assumed in respect of rationing domestic coal) without resorting to the financial control of the mines.

Probably the best check on the consumption of coal is an advance in price, but the economy is in such circumstances chiefly practised by the lower-middle and artisan classes, namely by those least able to meet an advance in price and to whom luxurious living is least known. Had home prices of coal been unrestricted by Government, not only would the so-called lower classes have suffered greatly and much discontent have been engendered, but the cost of industrial production generally would have enormously advanced because of the great enhancement in the coal bill. Therefore the Price of Coal (Limitation) Act was a national necessity, and some form of rationing was almost equally urgent.

Prior to the imposition by Government of financial control on the industry, the distribution of the coal of the country was carried out by District Committees of coal-owners on a voluntary basis. Excellent in many respects as this system was, and it continued to be carried out throughout the war period in so far as industrial coal was concerned, it did not allow of the Committees getting down to the house-to-house apportionment of coal, nor indeed was it ever pretended that it did, as it dealt only with the broad allocation of coal.

The method of rationing domestic coal eventually evolved under the system of control of the industry was in all respects as good as could have been devised in the circumstances. It is probable that the poorer classes were never better supplied with fuel. But a system of domestic rationing does not necessarily postulate financial control of the collieries; the same end might have been achieved had the Government commandeered the whole of the output from the collieries and dealt with it as seemed good to them. There are some persons well acquainted with the

industry who advocated this as the best method of meeting the fuel difficulties. It was not on account of the necessity of rationing coal that financial control of the collieries was determined upon, but for other reasons.

In view of the circumstances which arose in South Wales, financial control of the mines in that coal-field was unavoidable. It was unthinkable that the fuel requirements of the country, and of the navy in particular, should be held up at this period of great national emergency because of differences of opinion between employers and workmen respecting wage questions in a single coal-field. The only alternative was for the Government to step in. Comparative peace and harmony reigned in the other coal-fields. Wales was ever the industrial storm centre, but it is obvious that it would have been impossible for the Government to have controlled the mines in one coal-field to the exclusion of the others.

Prior to the advent of financial control of the industry by the Government, there did, in fact, exist a certain measure of control, namely in respect of the export of coal. Control of the export of coal was in the circumstances of the War unavoidable. It was absolutely necessary in order to retain in this country the coal necessary for inland consumption. It was necessary also in order that before neutral countries were supplied the requirements of our Allies, especially those of France, should be met. In part, the work of the Coal Exports Committee consisted in the readjustment of a dislocated supply and demand. Eventually the work of the Committee was considerably lightened by the creation of District Exporting Committees comprised of coal-owners and shippers. A notable function which these Committees performed was the application of 'coal pressure' on neutral Governments and their subjects in order to secure certain commodities in exchange for coal. Interfering as it did with the working of their business, it is to the credit of the coal-owners and exporting merchants that, recognizing the necessities of the case, they did not complain, but did their best to render all the assistance in their power to the Coal Exports Committee and the District Committees.

As regards the limitation in the price of coal, this was in the

nature of a self-denying ordinance. It constituted the outstanding event in the coal industry during the early period of the war. So much so, that I think a few points in connexion therewith deserve recapitulation.

1. It was the outcome of a recommendation from the coal-owners and miners on the Coal-mining Organization Committee and had the effect of limiting their profits and wages respectively.

2. It was almost the first attempt at a statutory limitation of the price of an essential commodity, and, on the whole, it achieved a remarkable success.

3. It fixed certain maximum pit-head prices for the sale of coal *for inland consumption*, thus conferring an enormous boon upon the British domestic and industrial consumer, while leaving the coal-owner free to get the best prices possible for coal *for export*, save for a limitation in the case of coal sold to our Allies. Thus at one time the price of the same coal was—for home consumption 16s. 6d. per ton, for export 60s., 62s. 6d., and 65s., and after the Armistice, but before the repeal of the Limitation Act, the same coal actually reached 150s. a ton for export. This export outlet rendered a system of licensing exports essential to the provision of an adequate home supply.

4. It contained machinery enabling the Board of Trade, for good cause shown, to raise the maximum prices to meet the increasing cost of production, wages, pit timber, &c.

5. Its success in limiting the price of coal was largely due to the fact that the United Kingdom was then a self-contained unit as regards the production of coal, the importation of coal being almost undreamt of. Consequently it was only necessary to fix a British price, not a world price. In attempting later to control freights, prices of grain, bacon, butter, &c., the Government were continually faced with the difficulty that there were world prices and world markets for these commodities, so that if they fixed the British price too low, the supply would simply 'dry up'.

6. Had it been accompanied by a limitation of the charges of the coal merchant and factor its boon to the consumer would have been greater still.

It is a matter for the economists to study how far the success of the policy outlined above was due to the peculiar conditions

of war, and how far the conditions making for success would be absent in time of peace. Even in its artificial state during the War the coal-mining industry was subject to varying phases of intense and moderate activity, and at one time, owing to the shortage of shipping due to the partial success of the submarine campaign, there was an actual depression. At first sight it may be difficult for the general reader to comprehend this, seeing that the productive capacity of the mines had been greatly reduced, and that during the war period the home demand for coal was considerably in advance of the normal due to the ever-increasing requirements for munition works. Further, the requirements for the navy during the first part of the War continued to increase until they attained to a figure several times higher than pre-war requirements, and France put her imported coal requirements at twice those of normal times. The fact is that the shipping position was the controlling influence, and this swayed backwards and forwards according to the increase or decrease in the activity of the submarine campaign.

During the period of depression mentioned above a number of miners were released for the army, but the supply of ships soon increased and they had to be recalled again to the pits.

The outstanding requirements in respect of the coal industry were : (1) maintenance of output at as high a figure as possible in order to meet the fuel demands of the country and those of our Allies and to permit of an export trade being carried on to secure necessary commodities in exchange for coal ; (2) the fair and effective distribution of the coal produced ; and (3) the prevention of exorbitant prices for coal supplied to home industries and for domestic use. These were the objects sought to be secured by the three Committees at work before the institution of the financial control of the industry.

Could these desiderata have been secured without some further form of control—though not necessarily such full control as was eventually exercised over the industry by Government ? Perhaps ; but, as I have already implied, on account of labour troubles, some form of financial control became necessary in order to maintain harmony between capital and labour. There were, as I have said, constant strikes and threats of strikes in South

Wales, and it was impossible to control one large coal-field without controlling all the coal-fields. But the institution of financial control of the collieries did not result, in the entire absence of wages disputes and the abandonment of the strike weapon, in securing the fulfilment of the claims occasionally put forward by the workmen. Disputes were, however, less frequent. It was not possible for the miners to base applications for advancement in wages on an increased selling price of coal or increased profits to the coal-owners. Applications for increased wages were made entirely on account of the higher cost of living. But the fact that the increment was a more or less determinable factor enabled a settlement to be arrived at without disrupting the industry, though not always without difficulty. With a view to emphasizing the fact that the advances in wages were of the nature of advances to meet the increase in the cost of living, they were made 'flat rate' advances rather than in the form of a percentage on the wages of the workers—one rate for men, another for boys. The method was probably, in the circumstances, a just method to adopt, but it was not devoid of disadvantages and drawbacks. For example, it acted as a deterrent to production, inasmuch as it was not in the form of a percentage advance, and, as a workman was assured of a certain wage without putting forward greater effort, it was a definite inducement, to those so minded, to malingering. That these disadvantages were real and not imaginary proved to be the case, though to the honest worker the provision was a just one. It was the datal or day-wage man, as opposed to the piece-work man or contractor, who suffered most from the increased cost of living, and his case would not have been adequately met by an over-all percentage advance on wages. I am not out to defend the 'war wage' system, as it came to be called, as a system to be adopted in normal times; far from it, but in the circumstances I have doubts whether any other method of advancement in wages would have met the situation. The flat rate advances were stamped, by their very name, as being of a transitory character and amendable as the cost of living rose or fell.

Speaking of control generally, apart from financial control, it did in fact secure a fair distribution of coal to the British public

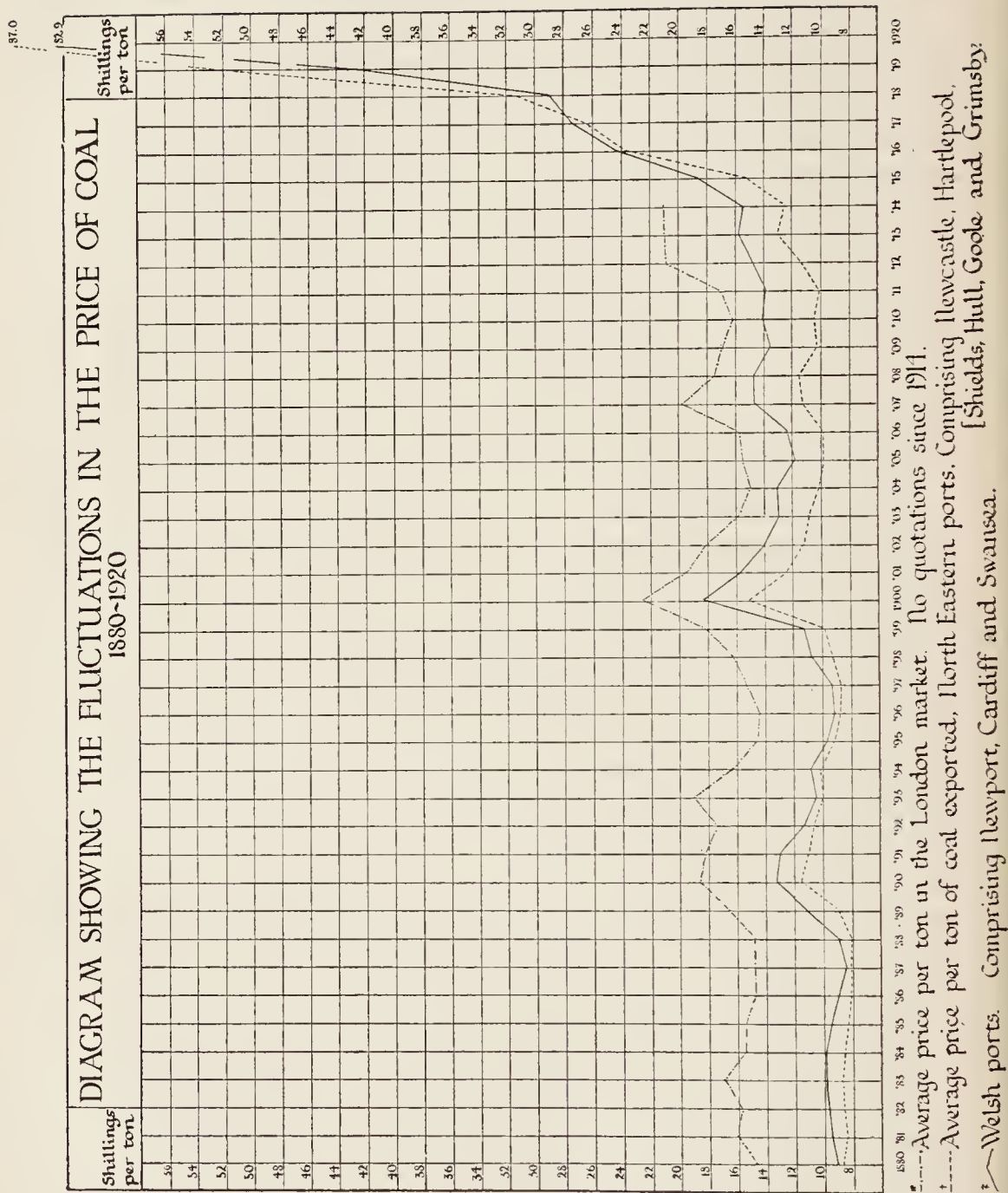


FIGURE 5.

and to the Allies, and did prevent prices soaring to extravagant heights. From the very high prices which characterized coal supplied to neutral nations during and subsequent to the war, it is evident that had the Government not instituted the control of export prices and the limitation of prices in respect of coal for home consumption, the cost of coal for industrial and household purposes would have been far in excess of that which actually ruled. The demand would have been far in excess of the supply, and in place of a rise, in respect of household coal, of 19s., which was the extent of the rise attained to about May 1920, it is not improbable that the advance would have been in the neighbourhood of 40s. or even 60s. per ton, and wages would have advanced far beyond the height to which they attained under control. The average coal prices actually reached are given in Appendix XI. Unfortunately it has not been possible to obtain the precise average of prices on the London market since the year 1914, but the maximum for best coals was certainly 60s. per ton. The variation in the average pit-head price of coal and the export price of coal from some of the principal shipping ports are shown diagrammatically in Fig. 5, p. 266. The prices of coal at the time of writing (December 1921) are falling and will doubtless continue to fall until they reach an economic basis, which they are very far from having done so far, but that they will ever reach a normal pre-war figure is very doubtful.

Of the total annual output of coal from the mines of the United Kingdom it was estimated in the year 1917 that about 42 million tons in normal times were carried by rail for home consumption alone, and it was also estimated that the coal transport scheme, evolved and carried out under the Control, would effect a saving in the transport of rail-borne coal of 700 million ton-miles per annum. I doubt whether that figure was ever attained, owing to the exceptions which it was found necessary to make in respect of the use of certain classes of coal for special purposes; but that a very great saving in length and time of transport, use of trucks, and of engine power resulted, there can be no doubt whatever. It might be asked, in view of the beneficial effects of this scheme during the period of coal control, why not have maintained it in existence after the mines

had been de-controlled? It is not easy to answer this question succinctly, and there are those who are of the opinion that it should have been continued. The continuance, however, would be impossible without control—the organization in itself is of the nature of control.

The period of partial control begun in February 1915 continued until February 1917, when the coal-mines passed into the possession of the Board of Trade by a regulation under the Defence of the Realm Act. Those concerned in the management of the mines were then informed that they must comply with the directions of the Board of Trade as to their management—save as to the Health and Safety Acts, which remained under the Home Office administration, and the liability of the owners, agents, and managers thereunder was not affected.

The work of the three Committees, to which reference has been made, was placed under the direction of a Controller of Coal-mines aided by an Advisory Board comprising seven coal-owners and seven workmen's representatives. The nature and far-reaching character of the financial control is explained on pp. 94-9, under the heading 'Coal-mines Control Agreement'.

It has been asserted, and, in my opinion, truly asserted, that one effect of the control of the industry has been the retardation of development. The fact that the pre-war profit was guaranteed to the owners, and that of the excess profits they received only 5 per cent., formed an inducement to the owners to prosecute only such developments as it was permissible to charge against revenue account. It therefore became necessary for safeguards to be erected to prevent development costs which should justly be charged to capital account from being charged to revenue account. That the mines at the present time are in a backward state of development, and that were the demand for coal suddenly to be increased to pre-war proportions it could not be met, is true—chiefly by reason of the lack of new undertakings to take the place of the older and dying concerns. Uncertainty also as to the ultimate outcome of control undoubtedly retarded the development of existing concerns and prevented the carrying out of new projects, in particular during the year 1919. Coal-owners did not know whether they would be permitted to retain

their mines, and the profit per ton which it was proposed to allow under the Bill introduced into Parliament to carry out the recommendations of the Sankey Commission, though it was eventually withdrawn, was not such as to induce coal-owners and financiers to expend the capital necessary for the opening out of large new concerns. One shilling and twopence, the figure named, whilst it might allow of a handsome return in the case of a shallow colliery with easily worked seams of high quality coal, would give but a poor return on a colliery working measures at great depth from the surface, over which a million sterling or more may have been expended on capital account before any return whatever was due to be received.

Necessary, however, as Government control and consequent centralization may have been during the abnormal conditions brought about by the War, no valid argument can be founded upon the fact in support of Government control of this or any other great industry in times of peace. The conditions are so entirely different. Complete freedom of action for those engaged in the management is absolutely essential to the successful conduct of so highly organized and technical an industry as that of coal-mining. Where an industry has to be conducted under a great diversity of conditions the edicts of a central authority stand in constant need of modification as they are applied to particular cases. Otherwise work will be conducted wrong-headedly and in defiance of material facts. True as this is of all great industrial concerns, it is particularly so in the case of mining. It would not be possible by a bureaucratic system of direction efficiently to administer the three thousand or more coal-mines of the United Kingdom. Control during the War was an instrument making for peace in the industry, but when the War was over and the industry was still under Government control, we witnessed in October 1920 a national strike.

It will be remembered that towards the close of the year 1918 labour trouble, which had been brewing for some time, became acute. The War was over and the workmen were clamouring for a substantial advance in wages, and some of them for other benefits. A powerful section was putting forward a claim for the nationalization of the mines and of the coal industry generally.

The portents at the opening of the year 1919 were ominous ; there was presented a situation in the industry quite the most difficult in its long history. On the Continent matters were far from stable or satisfactory. At home we were on the eve of a strike the end of which no one could foresee. This was the state of affairs when the Government set up the Coal Industry Commission to investigate the position and report to them. This Commission, composed of coal-owners, workmen's representatives, men of business independent of the coal trade, and professional economists, three of each class, presided over by a judge of the High Court, was clothed with greater powers than any previous Royal Commission. Whatever opinions may be held as to the several and opposing reports issued by the different sections of the Commission—unanimity was never attained or even approximated to—every one must agree that a greater mass of information relative to the coal-mining industry was collected and brought together than was ever before available, and the volumes of evidence, appendices, and reports must for long remain the well from which writers and investigators on subjects relative to the mining industry will draw. The Commission was known as the ' Sankey ' Commission from the name of the distinguished judge who presided over its deliberations. The Commission, which had to inquire into the conditions prevailing in the industry, dealt with many matters connected therewith—health, safety, costs, profits, hours of work, and conditions of employment generally. It considered also alternative methods for the future conduct of the industry, e. g. the existing system of private ownership and control, nationalization, and, as an alternative to nationalization, a system of aggregation of colliery interests and co-partnership.

There are about 3,129 coal-mines at present being worked in the United Kingdom under some 1,500 separate ownerships. By ownerships I mean private and public companies, or collieries owned by private persons not in the form of companies. Prior to the outbreak of war, had these been linked up in the form of a trust, e. g. the Westphalian Trust, the process and manner of their control during the War would have been simplified considerably.

The economics of administration and working attainable

under a system of aggregation must be patent to every broad-minded and inquiring student of the mining industry. Keen competition between rival coal-owners allows the foreigner in normal times to exploit the coal output of the country. Great economies could be achieved, too, by a centralized system of purchasing of stores, and important and far-reaching economies could be secured by centralization of pumping and, to some extent, winding plants, and, further, underground haulage would be simplified and cheapened by the abolition of eccentric boundaries. I believe that great economical advantages could be secured from the aggregation of colliery interests.

The gains or drawbacks of nationalization, on the other hand, hinge upon definite principles of human action and experience. Whatever results may accrue from such a policy, from the record of observation I find great difficulty in believing that it would make for efficiency. During the period of control the representatives of the State did their best, and they were often unfairly criticized, but it is certain that no experienced head amongst them would care to put forward the claim that public management has a genius for either efficiency or economy. It was imperative at the time to impose unified action in important matters, where there was no existing machinery within the industry capable of doing so. But the virtue was in the co-ordination and not in the hand directing it, and there can be no doubt that joint action from within, had it been available at the moment it was required, would have produced a more effective and economical mechanism. A prominent instance of this was the system of voluntary district coal distribution which was carried on by committees of the coal-owners. Even if nationalized control were not vetoed by the inherent physical difficulties of the case, it would still have the disadvantage of removing from the industry the great energizing forces of personal responsibility and initiative.

It is difficult to forecast the future of the coal-mining industry, and it is doubtful whether any useful end would be served by attempting to do so. If the industry is to be of the same service to the nation in the future that it has been in the past—and to it more than to any other branch of industrial activity does Britain owe her great wealth and industrial pre-eminence

among European nations—three basic requirements must be fulfilled :

- (a) The industry must be carried on at a profit.
- (b) It must result in the production of an ample supply of cheap coal of good quality, that is, of such price and quality as will not preclude coal-consuming industries, great and small, from being carried on at a profit.
- (c) The industry must be capable of providing such wages to the workers employed therein as will ensure a decent standard of living and conduce to industrial peace.

Whatever scheme for the carrying on of the coal-mining industry may be devised in days to come, it is doomed to ultimate failure, resulting in chaos to the industry, unless it secures in some measure the accomplishment of these three essentials.

About a year ago a cartoon appeared in *Punch*, in which three persons were depicted, two of them representing respectively Capital and Labour in a pugilistic attitude, whilst in close proximity, leaning against a wall, was the athletic figure of a man of a somewhat sardonic countenance. A lettered sash around his waist announced the fact that he represented 'Economic Law'. At the foot of the cartoon ran the legend : 'When you two gentlemen have finished your contest, you have to reckon with ME.' There is no kicking against the pricks ; economic law is inevitable and invincible. Restriction of output augments cost of production and temporarily raises selling prices. High prices kill demand, and a falling demand means increased unemployment.

This review of the history of the coal-mining industry in the United Kingdom during the War would be incomplete without an acknowledgement of the thorough and unpretentious work of the colliery managers as a body, work which was recognized and appreciated by all who came into contact with them. If it had not been for their loyal co-operation the successful control of the collieries would have been impossible. This help they gave unstintingly. Of the miners, whenever one is inclined to criticize them on the occurrence of strikes dislocating trade and industry, be it remembered that these are the same men who, when the safety, and indeed the existence, of the country was in jeopardy, flocked voluntarily by hundreds of thousands to the Colours and did yeoman service in the Great War.

APPENDIX I¹

[Page 1]

WAR TRADE DEPARTMENT.

Reference Number

The above space is to be left blank.

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**Summary of Application for LICENCE TO EXPORT A
SPECIFIC SHIPMENT OF COAL OR COKE.**

Date

Name of the Consignor by whom or (.....
on whose behalf application is made \

Name of person, firm, or company /
to whom Licence should be sent \

Kind of Coal or Coke

Name of Ship

Port or ports of discharge

Consignee

Proposed date of Shipment

Applicant's reference number (See below at 4).....

(If a duplicate of, or in connection with, any previous application, give
W.T.D. reference No. of the previous application).....

DIRECTIONS FOR FILLING UP THIS FORM.

1. Applicants for export licences are requested in their own interests to fill up the form, on this page and overleaf, fully and correctly : and to give as long notice as possible (not exceeding four weeks) of their desire to export.

2. All the requisite particulars as to the coal or coke to which the application relates should be given on the form itself and not on a covering letter.

3. This form should not be used for applications for a general licence to export coal or coke in more than one shipment. Another form is provided for that purpose.

4. For convenience of reference, applicants are recommended to date and number their applications on the line provided above, and to quote this date and number in any further communication (as well as the War Trade Department reference number, if known).

**5. NON-COMPLIANCE WITH THESE DIRECTIONS MAY INVOLVE
DELAY.**

This form when filled up must be sent direct to :—

The Secretary (Coal Division),

War Trade Department,

4, Central Buildings, WESTMINSTER, S.W.

See further information on Page 4.

Licence

Drafted by _____

Checked by _____

Issued _____

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[Page 2]

Particulars to be furnished by applicants for Licences to Export a Specific Shipment of Coal and/or Coke :—

If the space provided in the form is not sufficient under any head, the particulars AS TO THAT HEAD may be given on separate foolscap sheets which should be attached to this form. SIX COPIES OF THOSE PARTICULARS should be furnished, and one extra for each port of shipment (if more than one).

(a) The name and address of the applicant and the description of business carried on by him	
(b) Name and address of person, firm, or company to whom the licence is to be sent	
(c) The name and nationality of the vessel by which the shipment is to be made, where known	
(d) Present position of vessel and nature of previous or present inward cargo	
(e) Date and short particulars of the contract or definite order under which the shipment is to be made	
(f) Port or ports of intended shipment in this country, and date of shipment	
(g) Prospective port or ports of discharge	
(h) The full name and Postal Address of the Government Department, municipal authority, person, firm or corporation to whom the coal or coke is to be consigned, and the description of the business (if any) carried on	
(i) Ultimate use or destination of the coal or coke	

(j) Total Quantity or Weight of coal or coke.	Values per ton F.O.B. and total value.		Description. It must be stated, in addition to any more specific information, whether the coal is anthracite, steam, gas, household, coking or any other kind, and in the case of coke, the kind of coke, e.g. whether gas or foundry.	Colliery and county where situated.
	£	s.		
Tons.				

(k) Special reasons or submissions for the grant of a Licence

*Strike out the words not applying.

I hereby declare that to the best of my knowledge and belief the foregoing particulars are correctly stated, and that the proposed shipment is in

** { pursuance of an existing contract, } and I undertake that if this licence*

{ execution of a definite order, }

is granted to me, it shall be used solely for the export of goods which are either my own property or the property of a person, firm, or a company for whom I act in this transaction as the sole responsible representative.

Signature of Applicant.

[Page 3 blank : for official use only]

[Page 4]

PROHIBITION OF EXPORTATION OF COAL.

Instructions as to Applications for Licences.

1. It is essential that in all cases the necessary particulars specified in the approved form of application be duly supplied, but it has been decided to admit the following modifications, for the time being, viz. :

(a) That where the applicant has a definite ship in view, but is not certain that he can secure it, he may apply for shipment by the ship in question, 'or substitute', within strict limits of date.

(b) That applications for permission to export by a ship to be named later will be entertained, the procedure being as follows :

(i) The Coal Exports Committee will deal with the application and, provided a stamped telegraph form be furnished, they will inform the applicant by telegram of the recommendation they will be prepared to make.

(ii) On receipt of the name of the ship, which should be sent to the War Trade Department (the registered number of the application being quoted) the licence will be issued, where granted.

2. It should be understood, however, that the Committee will find it easier to deal with applications in which full and precise particulars are before them at the same time.

3. In the case of Scandinavian shipments, it is especially desirable that the nature of the cargo brought, or being brought, to this country by the vessel in question should be stated.

4. In order to minimize risk of inconvenience to themselves, shippers should make their applications well in advance of the contemplated date of shipment.

APPENDIX II¹REPORT OF THE COAL-MINING ORGANIZATION COMMITTEE
ON THE LIMITATION OF THE SELLING PRICE OF COAL,
WITH EXPLANATORY STATEMENT BY MR. PEASE

To the Right Honourable

Sir John Simon, M.P.

SIR,

In accordance with your instructions we have given further consideration to the question of the limitation of the selling price of coal. We understand that in respect of this matter the Board of Trade have come to the conclusion that it is desirable to establish by legislative enactment maximum selling prices of coal, and that the President of the Board of Trade would be glad to receive our views as to the best way in which this could be given effect to. One of us, Mr. Pease, regards the enforcement of maximum prices in respect of *all* classes of coal as injudicious and liable to give rise to serious difficulties, and he has prepared a separate memorandum putting forward his objections, which is appended hereto. However, on the understanding that the Government is definitely determined to fix maximum selling prices, he is in agreement with the rest of the Committee as to the manner in which this can be best effected, and joins in the submission of the following outline of a scheme which seems to us most suited to carry out the object in view.

SCHEME FOR THE REGULATION OF THE SELLING PRICE OF COAL

1. We are of opinion that the maximum prices of house coals should be fixed at 4*s.* per ton above the average price of each class of house coal in each district for the two years ending the 30th June 1914, and for the purposes of this clause a district might be defined as the area covered by a local Coal-owners' Association.

2. The maximum selling price of all other classes of coal purchased for consumption within the United Kingdom should be fixed at 5*s.* per ton above the average price of that class of coal realized at the pit head at each individual colliery during the two years ending the 30th June 1914, provided that in the event of any marked inequality in the prices realized at any individual colliery for the same quality of coal compared with other collieries in the district being found to exist, then such prices shall, on the application of the colliery owners or buyer, be subject to adjustment by the Local Committee hereinafter provided for.

3. Local Committees with statutory powers to be appointed to see that the prices charged do not exceed the maximum prices fixed under these provisions. Such Committees to be entitled to require a certified return to be sent in by the coal-owners of the prices realized for each class of coal sold from the colliery for the two years ending the 30th June 1914,

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and also to call for a return of sales made, and to appoint a Chartered Accountant to examine all books and documents in connexion with the sale of coal and generally to exercise all the necessary powers to give effect to these provisions.

4. The statutory Local Committee to be composed of an equal number of representatives of the coal-owners and of the workmen, who shall be nominated by the Local Coal-owners' and Workmen's Associations respectively, and appointed by the Board of Trade, such Committees to be presided over by an independent Chairman, nominated by the Committee and appointed by the Board of Trade. In the event of failure to nominate either members or Chairman of the Committee they shall be appointed by the Board of Trade without nomination. The Committee not to exceed four representatives of coal-owners, four representatives of the workmen, and the Chairman, or nine in all.

5. Maximum prices not to be fixed in respect of coal exported to foreign countries nor in respect of bunker coal supplied for the use of a steamer itself; but substantial *ad valorem* tax to be imposed on all coal exported to foreign countries, and the shipper of the coal to be made liable for the payment of the *ad valorem* tax. It does not appear to be desirable to impose a tax upon coal supplied as bunker coal for steamers' own use, if some arrangement can be devised for the control of freights. But this seems to us difficult of achievement as long as steamers belonging to foreign countries can enter into competition with British steamers for the carrying of coal. It might be worth while considering whether a tax could not be put upon foreign steamers carrying British coal in order to equalize to some extent the competition of such foreign steamers in the event of there being any limitation of freights as suggested above.

It may be desirable to differentiate between coal exported to the Allies and coal exported to neutral countries in respect of the proposed *ad valorem* tax on exported coal.

6. All contracts entered into prior to the passing of a Bill governing the selling prices or taxation of coal should be excluded from the provisions of such Bill.

7. Provisions to be made for the control of prices to be charged by the middlemen or distributors of coal in so far as this applies to the home trade, and the statutory Local Committees should have powers conferred upon them to examine, through accountants appointed by them, the books of such middlemen and distributors and to call for any evidence which they may consider necessary to enable them to ascertain the prices charged by such middlemen and distributors of coal, such provisions to be extended so as to secure the same control over the position of middlemen and distributors of coal as is proposed with reference to the prices of coal-owners.

This proposal to control the prices of middlemen or distributors of coal may require separate consideration, as the machinery that may be devised to carry out the provisions with reference to the mining industry

may not altogether be applicable to the cases arising in connection with the control of the prices of middlemen and distributors. These might be left for adjustment by the District Committees, with a right of appeal to such Committees on the part of the middlemen, distributors, or other parties.

8. Any breach of these provisions to be penal, and suitable penalties for any breach thereof to be fixed.

9. The foregoing provisions to apply for the period of the War only, and to come into operation as from the date of the passing of any Act of Parliament intended to give effect to the provisions, and not to be retrospective.

10. These recommendations regarding the regulation of the coal trade are based on the supposition that similar provisions are applicable to all other trades in which coal constitutes an essential factor in carrying on the business.

We have the honour to be,

Sir,

Your obedient Servants,

R. A. S. REDMAYNE.

C. E. RHODES.

R. SMILLIE.

VERNON HARTSHORN.

S. WALSH.

EXPLANATORY STATEMENT BY MR. PEASE

I regret that I cannot concur in the view that maximum prices for coal should be fixed, both because such action would, in my opinion, be unfair to the Coal-owners and Miners, and also injurious to the Community as a whole.

As regards the first point, the Coal-owners have not up to the present made abnormal profits, but as far as my experience goes their profits have been on a very reduced scale, and in some cases there has been an actual loss.

There may be exceptions in the case of districts or particular collieries which had large quantities of coal free for sale during the last few months, but generally Coal-owners have had to bear the burden of carrying out contracts at low prices, which were fixed either prior to the War or during the early months of the War when prices were lower than the corresponding period of the previous year, while their costs have been heavily increased owing to reduced output (due during the earlier months of the War to the limited demand for coal and the difficulty of obtaining tonnage, and to a gradually increasing extent to the men enlisting in the Army), to the special increase of wages, and the large increase in the cost of timber and other stores.

In recent months high prices have been obtained for free coal, but this was only possible on a very small proportion of the output, and, as a rule, has not been sufficient to cover the extra expense.

Moreover, no other trade in the country, up to the present, has had maximum prices fixed, and there seems no reason why ship-owners, iron and steel makers, and others who are obtaining high freights and good prices for their materials, should not pay a proportionately higher price for their coal.

The fixing of maximum prices, with all the machinery necessary, will entail a very large amount of extra work on the part of the already depleted and overworked staffs.

Looking at the matter from the national point of view, it is to the interest of this country that we should get the highest price we possibly can for coal sent abroad or bunkers supplied to foreign vessels.

Whatever figure was fixed as an addition to the normal price which is to be allowed, will have a tendency to become the minimum as well as the maximum price, while if the market is left uncontrolled the increase in price will be much larger in some classes of coal than in others, being adjusted according to the demand for the particular class of coal required for the time being.

The increase in the price of coal at home will tend to economy in the use of coal and enable a larger proportion to be shipped abroad.

Generally the fixing of prices will cause a great deal of confusion and an enormous amount of work on whoever has to regulate it, and if the demand for coal exceeds the supply it will be very difficult to prevent middlemen or third parties purchasing the coal at the minimum and realizing as profit in some way or other the additional price which should go to the Coal-owners and the Miner.

If there had been any combination of Coal-owners to keep up the prices against the community I would have been in favour of taking the strongest steps possible to break that down, but as far as my acquaintance goes with the Coal Trade it is run on a free trade basis.

The abnormal prices, which, owing to a kind of panic, did rule for a short time, have now fallen by several shillings a ton, and the need for taking such measures seems to have passed away, even supposing they were in certain circumstances desirable.

In conclusion I would say that, if necessary, I would not object to steps being taken to limit the price of house coal, with an arrangement that those who have been supplying house coal should continue to supply the same proportion of their output for household purposes, even though such price might be below the open market price for the same class of coal.

It is only fair to state that the Coal-owners in Durham and several other districts have of set purpose kept down the price of coal to the householder even while much higher prices were obtainable in the open market.

In short, if the prices are fixed it will enormously increase the difficulties of carrying on the Coal Trade and keeping the pits at work, which are already great, and prevent the coal naturally flowing into the channels where it is most wanted.

A. F. PEASE.

APPENDIX III¹

PIT WOOD AND OTHER MINING TIMBER

INSTRUCTIONS

1. STOCKS

(a) THERE are at present a number of collieries which have a stock of pit wood and other mining timber exceeding twelve months' consumption, while, on the other hand, there are a number of collieries which have nothing like the quantity which, in view of the difficulties which are at present attendant upon the obtaining of this material, and which are likely to increase during the coming year, constitutes a margin of safety. Accordingly, it is considered necessary to direct, and it is hereby directed, that an owner or manager of a coal-mine shall not at any time put into stock either at the mine or elsewhere on behalf of the mine a larger quantity of pit wood and other mining timber than represents twelve months' future consumption. In estimating the twelve months' future consumption, regard must be had to the average of the past three years as modified by calculations of any past or future increase or decrease due to fluctuations in output and changes in the development of the colliery.

(b) The owner or manager of any coal-mine, in the case of which there is either at the mine or elsewhere on behalf of the mine at the date of this letter a larger stock than twelve months' future consumption as defined above, shall not add to stock or bring to the mine any further quantity until such stock shall be reduced to an amount below twelve months' future consumption, as defined above.

(c) It is realized that in many parts of the country a stock of twelve months' future consumption is unattainable, and, further, that it may be necessary at a later date to reduce this quantity in order to enable the collieries having very much smaller stocks to bring their stocks up to a margin of safety.

2. MAXIMUM PRICES

The following are the maximum prices which collieries are permitted to pay upon any contracts or 'spot' or other purchase made after the date of this letter for the various classes of pit wood and other mining timber, and any purchases of standing timber must be made at such prices as will enable the colliery to conform to this schedule.

(A) Collieries in the counties of Brecon, Carmarthen, Glamorgan, Monmouth, Pembroke, Radnor, Gloucester, and Somerset.

The maximum net prices for pit wood and other mining timber

(i) Home grown, delivered on rail at colliery sidings, or failing rail connection, at colliery premises, and

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(ii) French, Portuguese, or Spanish, *ex ship* shall not exceed 60*s.* per ton for hard wood and 65*s.* per ton for soft wood.

(B) Collieries elsewhere in England and Wales.

The maximum prices for (i) pit props in the round (home-grown timber), cut to lengths, delivered on rail at colliery sidings, or, failing rail connection, at colliery premises, mixed woods, shall not exceed the following :

		s.	d.	
2½	inch	12	6	per 100 feet lineal.
3	„	16	0	„ „ „
3½	„	24	0	„ „ „
4	„	32	0	„ „ „
4½	„	37	0	„ „ „
5	„	50	0	„ „ „
5½	„	55	0	„ „ „
6	„	63	0	„ „ „
6½	„	72	0	„ „ „
7	„	80	0	„ „ „

In the case of collieries requiring all larch, the above prices may be increased by not exceeding 10 per cent. These prices are subject to the usual monthly account, less 2½ per cent. discount, in accordance with trade custom.

(ii) For home-grown timber (other than pit props cut to lengths in the round, for which see (i) above), both soft woods and hard woods, delivered in the round on rail at colliery sidings, or, failing rail connection, at colliery premises, the maximum prices shall not exceed 2*s.* 3*d.* per cubic foot, tape over bark, and for pure larch, 2*s.* 7*d.* per cubic foot, tape over bark, with the customary allowances for bark.

(C) Collieries in Scotland.

The maximum prices shall not exceed those laid down in the statement annexed to the Acland Award of the 16th June 1916, Parts 1 and 2, of which a copy follows, plus 5 per cent. additional for long pit wood and 7½ per cent. additional for sawn props. The price for large mining timber delivered free on rail at nearest railway station shall not exceed 50*s.* per ton.

ACLAND AWARD

Home Pit Wood Supplies for Scotland, 1916-17

The representatives of the coal-masters of Scotland and the timber merchants of Scotland, present at a conference at 4, The Sanctuary, Westminster, on the 9th June 1916, having agreed to accept my determination in respect of the proposed contracts for supplies of home-grown pit wood to the coal-mines of Scotland, I have considered all points at issue and hereby determine as follows, viz. :

1. The period of the agreement shall be for fifteen months from the 1st July 1916, and shall terminate on the 30th September 1917, unless expressly continued by both parties.

2. The agreement shall be subject to the continuance of the present maximum 10s. (ten shillings) per ton railway rate for pit wood in Scotland, but in the event of any alteration therein the prices shall be subject to readjustment to the extent to which such alteration affects the freight cost to the sellers.

3. The prices shall be those quoted in the statement hereto annexed, subject to the proviso that the quantities of small pit wood shall be approximately in the proportions stated, and further that the coal-master and the timber merchants will adjust the proportion of the three classes of long pit wood to be supplied.

4. The total quantity shall not exceed 100,000,000 lineal feet, and shall not be less than 60,000,000 lineal feet, the actual quantity to be fixed by the parties themselves.

5. All species of timber, except beech, will be accepted, subject to the understanding that the main supply will be from coniferous timber. The pit wood will be unpeeled.

6. Delivery will be on rail at collieries. Terms net cash on monthly account.

16th June 1916.

STATEMENT ANNEXED TO AWARD OF 16TH JUNE 1916—PART 1

Small Pit Wood

<i>Round props and bars</i>	<i>Equivalent sawn props</i>	<i>Length</i>	<i>Price per 100 lineal ft.</i>	<i>Approx. proportion of each class</i>
			<i>s. d.</i>	<i>Per cent.</i>
2 in. diameter tip under bark	4 $\frac{3}{4}$ in. quartered or 2 in. square or equal	Up to 2 $\frac{3}{4}$ ft.	5 3	3
2 $\frac{1}{4}$ in. diameter tip under bark	5 $\frac{1}{4}$ in. quartered or 2 $\frac{1}{4}$ in. square or equal	Up to 3 ft.	6 5	} 15
2 $\frac{1}{2}$ in. diameter tip under bark	5 $\frac{3}{4}$ in. quartered or 2 $\frac{1}{2}$ in. square or equal	Up to 4 $\frac{1}{2}$ ft.	7 11	
3 in. diameter tip under bark	5 $\frac{3}{4}$ in. quartered or 2 $\frac{3}{4}$ in. square or equal	Up to 5 ft.	9 11	} 45
3 in. diameter tip under bark	5 $\frac{3}{4}$ in. quartered or 2 $\frac{3}{4}$ in. square or equal	From 5 ft. to 6 ft.	11 1	
3 $\frac{1}{2}$ in. diameter tip under bark	7 $\frac{3}{4}$ in. quartered or 3 $\frac{1}{8}$ in. square or equal	Up to 6 ft.	12 11	20
4 in. diameter tip under bark	8 $\frac{1}{2}$ in. quartered or 3 $\frac{3}{8}$ in. square or equal	Up to 6 ft.	17 1	12
4 $\frac{1}{2}$ in. diameter tip under bark	9 $\frac{1}{2}$ in. quartered or 3 $\frac{5}{8}$ in. square or equal	Up to 7 ft.	20 6	5
				100

STATEMENT ANNEXED TO AWARD OF 16TH JUNE 1916—PART 2

Long Pit Wood

<i>Diameter at tip under bark</i>	<i>Length</i>		<i>Price per 100 lineal ft.</i>
	<i>ft.</i>	<i>ft.</i>	<i>s. d.</i>
3 in.	10	to 14	18 6
4 „	10	„ 14	23 3
5 „	10	„ 14	30 0

3. CONTRACTS

All existing contracts for the purchase of pit wood and/or other mining timber which involve any excess over the maximum prices set forth above, and which involve or are likely to involve delivery, or under which it would be open to the seller to deliver or to the buyer to take delivery, at any date subsequent to the 30th June 1918, must be submitted to the Controller of Coal-mines under reference P. 3372 PT. for inspection by him and, if necessary, for directions or advice as to revision. In the first instance, two copies of the original contracts should be sent, but not the originals.

4. Copies of this letter are being sent to the District Pit Wood Committees, and all questions arising thereon should be addressed to the Controller of Coal-mines through the District Pit Wood Committees.

Copies of contracts, however, and questions arising thereon should, as requested in paragraph 3 hereof, in the first instance be referred to the Controller of Coal-mines direct under the reference P. 3372 PT.

APPENDIX IV¹

SUMMARIZED STATISTICS FURNISHED BY SIR ARTHUR LOWES DICKINSON, SHOWING THE OUTPUT AND VALUE OF MINERAL RAISED, &c., DURING THE YEARS 1889-1918, AND STANDARD AND ACTUAL OUTPUT AND PROFITS DURING CERTAIN PERIODS OF THE YEARS 1917 AND 1918

STATISTICS OF COAL-MINING INDUSTRY FROM 1889 TO 1918, COMPILED FROM GOVERNMENT RETURNS AND ESTIMATES

1 <i>Period</i>	2 <i>Tonnage raised (millions)</i>	3 <i>Value at pit head per ton raised</i>	4 <i>Profits and royalties</i>		5 <i>Cost per ton raised excluding royalties</i>			6 <i>Persons employed</i>	7 <i>Get per person employed, Tons</i>	8 <i>Earnings per annum per person employed</i>
			<i>Amount (millions)</i>	<i>Per ton raised</i>	<i>Wages</i>	<i>Other costs</i>	<i>Total</i>			
		<i>s. d.</i>	<i>£</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>			<i>£</i>
Average, 1889 to 1893	178·0	7 4·18	11·7	1 3·78	4 7·16	1 5·24	6 0·40	631,600	282	58
" 1894 to 1898	195·5	6 2·16	8·7	0 10·68	—	—	—	680,800	286	—
" 1899 to 1903	224·3	8 8·76	19·2	1 8·54	5 5·52	1 6·70	7 0·22	776,680	288	35
" 1904 to 1908	249·8	7 10·94	17·2	1 4·52	—	—	—	881,890	283	—
Year 1907	267·8	9 0·60	24·4	1 9·86	—	—	—	925,097	289	—
" 1908	261·5	8 11·00	22·7	1 8·83	—	—	—	972,232	269	—
" 1909	263·8	8 1·00	14·9	1 1·55	—	—	—	992,333	266	—
" 1910	264·4	8 2·25	15·9	1 2·43	—	—	—	1,027,339	257	—
" 1911	271·9	8 2·00	15·3	1 1·50	—	—	—	1,045,272	260	—
" 1912	260·4	9 1·00	21·2	1 7·54	—	—	—	1,068,751	243	—
" 1913	287·4	10 1·52	28·0	1 11·38	6 4·01	1 10·13	8 2·18	1,110,884	259	82
" 1914	265·7	9 11·79	21·5	1 7·42	6 2·92	2 1·45	8 4·37	1,054,105	252	79
" 1915	253·2	12 5·60	27·4	2 1·97	7 9·58	2 6·05	10 3·63	939,604	270	105
" 1916	256·4	15 7·24	43·8	3 5·00	9 9·12	2 5·12	12 2·24	984,796	260	127
" 1917	248·5	16 8·69	33·7	2 8·55	10 5·53	3 6·61	14 0·14	1,006,299	247	129
" 1918 *	227·5	22 4·00	35·5	3 1·50	13 2·80	4 3·20	17 6·00	948,000	240	159

* Estimated from the information relating to January—September 1918.

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APPENDIX V¹

RECRUITMENT OF COAL-MINERS. INSTRUCTIONS TO LOCAL TRIBUNALS

1. In the consideration and decision of cases the court shall be guided by instructions issued from time to time by the central court.

2. The Colliery Recruiting Court will hear and decide, in the case of men employed in the area for which they are appointed, questions which may be raised by the local recruiting officer as to :

(a) Whether any person who is alleged to be a coal-miner is, in fact, a coal-miner ; or

(b) Whether in the case of any coal-miner it is no longer necessary in the national interest to retain him in civil employment.

3. Every application by the local recruiting officer for the consideration of any such question shall be sent to the Divisional Inspector, and may be delivered at or sent by post to his address.

4. Where any such application is made not less than one week before the day fixed for the consideration of the question, notice in writing shall be sent by post or delivered by the court to the local recruiting officer and to the man with respect to whom the question has been raised, and to his employer, of the date and place fixed for the consideration of the question, and with the notice there shall be sent particulars of the question to be raised.

5. The man with respect to whom the question has been raised, and his employer, or a person in the service of the employer authorized to represent him, shall have the right to be present at the hearing of the case by the court and to be heard as a witness. The court may also hear such other witnesses as the court think fit, but shall not admit any person to be heard as an advocate.

The local recruiting officer shall also have the right to appear and to be heard as a party in every case heard or considered by the court, either in person or by a representative of military interests duly authorized in writing by the General Officer Commanding-in-chief of the Command.

6. The decision of the court upon the question referred to them shall be forthwith communicated in writing to the parties.

7. A record of the decision of the court upon a case shall be entered on the notice of application, and a register of cases shall be kept on the prescribed form.

8. If any of the parties concerned is dissatisfied with the decision of the court, the court may, if application is made to the court on the prescribed form within five days after the decision of the court, and the

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court is of opinion that a question of principle or important issue is involved, grant leave to appeal to the central court. If leave to appeal is granted, the court shall forward forthwith to the central court the notice of appeal and the other documents relating to the case, and a statement of the question at issue and of the grounds of their decision.

9. These instructions may be added to, varied, or revoked by any subsequent instructions.

APPENDIX V A

COLLIERY RECRUITING COURTS

Military Service Act, 1916

INSTRUCTIONS

1. THE provisions of the Act will apply to all men employed in coal-mines who are not already attested and who fall within the description in Section 1 of the Act, unless exempted in pursuance of Section 2 of the Act.

The Home Secretary has certified in pursuance of Section 2 (2) that the work carried on at coal-mines is work of national importance.

2. In the case of men working underground in coal-mines and of surface workers at coal-mines and officials in charge of such workers, exemptions on grounds connected with business or employment¹ will be granted by the Colliery Recruiting Courts, acting on behalf of the Home Office. (The courts have no jurisdiction in regard to clerks in colliery offices or in regard to persons not employed on the mine premises. Persons employed in coking and by-product works, whether situated on the mine premises or not, are also outside the jurisdiction of the courts.)

3. Applications for exemption have to be sent in before the 'appointed date', i. e. the 2nd March 1916, but applications received after the 2nd March 1916 may be entertained if it is shown to the satisfaction of the court that the failure to make the application before that date was due to absence abroad or to any cause that appears to the court to afford a reasonable ground for allowing the applications to be so made.

4. The Home Office has sent to the owner of each coal-mine forms for use in making applications in respect of the men employed at the mine and coming within the Act. The owner has been instructed to forward the forms duly filled in and certified by him (in duplicate) to the Colliery Recruiting Court before the 2nd March 1916. Separate forms to be used

¹ Exemptions on the other grounds mentioned in the Act will be granted by the Local Tribunals established under the Act, and applications for such exemptions must be made to the Tribunals and not to the Colliery Courts.

for (1) men belonging to the 'barred'¹ classes, (2) men belonging to the non-barred classes. These forms when received duly filled in and certified will be treated as applications for exemption under the Act.

5. The Colliery Recruiting Court will proceed to deal as soon and as rapidly as possible with the applications received from the mines in its area.

6. The following rules as to procedure will be observed :

- (i) The court will forward the duplicate copies of the application forms to the military representative as they are received.
- (ii) The military representative will have the right to appear at the hearing of any application. The men employed at any colliery shall be entitled to appoint a representative to attend before the court when the applications in regard to that colliery are being heard, and shall give notice of such appointment forthwith to the court.
- (iii) At least three clear days before the hearing, the court shall send to the owner, to the representative (if any) appointed by the men, and to the military representative, notice in writing of the date and place fixed for the hearing.
- (iv) All hearings shall take place in public unless the court in any particular case, due regard being given to the interests of the parties and of any other person concerned in the application, consider that an application or any part of the proceedings thereon should be heard in private, provided that the court may exclude the parties and the public at any time during the hearing of an application for the purpose of conferring upon any question affecting the decision of the application.
- (v) The court may, if it thinks fit, cause to be read at the hearing and take into consideration any written statement made by the owner or his representative, or any man whose case is under consideration, or the military representative, when not present or represented at the hearing.
- (vi) A record of the decisions of the court shall be entered on the application forms, which shall be filed in the office of the Divisional Inspector.

7. (a) *Applications in respect of men belonging to the 'barred classes' (Form 1).* If the court is satisfied with the particulars entered in the form, that the principal and usual occupation of a man entered in Form 1 is one of the barred occupations, the court will grant without any formal hearing of the case a certificate of exemption in Form A. If in any case

¹ The 'barred' classes are persons employed underground and persons employed on the surface as winding-enginemmen, pumpmen, weighmen (including check weighmen), electricians, fitters, and mechanics. Certified managers, under-managers, and surveyors are regarded as being included in the 'barred' classes.

it appears to be doubtful whether the man belongs to the barred classes, the court will investigate it, hearing the owner or his representative, and the representative of the men and the military representative, if they so desire. If the court decides that the man does not belong to the barred classes, but that he should be exempted on the ground that 'it is expedient in the national interests that the man should, instead of being employed in military service, be engaged in other work in which he is habitually engaged'—they will give him a certificate of exemption in pursuance of the next paragraph.

(b) *Applications in respect of men belonging to the non-barred classes of surface workers* (Form 2). The question which the court will have to decide is whether 'it is expedient in the national interests that the man should, instead of being employed in military service, be engaged in other work in which he is habitually engaged'. If it is shown to the satisfaction of the court that the services which the men perform are indispensable to the working of the mine, and that they cannot be performed by available men not of military age or otherwise not fit for military service, they will grant an exemption. The court will hear the owner or his representative in support of his claim for the grant of certificates of exemption to these men, the representative of the men and the military representative, if they so desire, and such other witnesses as the court think fit, and will then decide which men are to be exempted and which not. Men to be exempted will be given certificates in Form A, with the addition after the words 'in a coal-mine' of words specifying the actual occupation in which the man is engaged (e. g. 'as a banksman').

8. *Applications in respect of attested men.* The foregoing instructions do not apply to men already attested under Lord Derby's scheme; but it has been decided that a similar procedure shall be followed in regard to them, in lieu of the present procedure. Attested men belonging to the 'barred' classes are to receive exemption certificates (but on a different form, Form B) in the same way as men of those classes who come under the Act, and as regards non-barred men, an employer will be allowed to make (instead of the claims for postponement as men are called up) an immediate application for exemption, which may be either without limit of time or temporary, according to the judgement of the court after reviewing all the circumstances of the case. Where temporary exemption is granted it should be for a fixed period of time, not to a later group.

The procedure will accordingly be as follows:

The owner has been requested to fill up and submit to the Colliery Recruiting Court (at the same time as the forms in respect of men under the Act) similar forms (Nos. 3 and 4) in respect of his attested men, entering on separate forms the 'barred' and the 'non-barred'. (The forms supplied for this purpose are on paper of different colour from those for men under the Act.)

These will be considered by the Colliery Recruiting Court at the same

hearing as the applications by the owner in respect of the men under the Act.

As regards attested men of the barred classes. The court will proceed as under 7 (a), but the certificates given will be in Form B instead of Form A.

As regards attested men of the non-barred classes. The court will proceed as under 7 (b), but the certificates will be in Form B instead of Form A.

9. The court will communicate its decision to the owner and recruiting officer forthwith at the hearing, and the individual certificates will be made out subsequently (as soon as possible after the hearing) and forwarded to the owner for distribution to the men concerned.

10. An application may be made by the man himself instead of by the mine-owner. This will usually be unnecessary, but it will be the proper course in some cases (e. g. that of a check weigher, who is regarded as being within the barred classes, or that of a surveyor practising independently and doing the survey work under the Coal-mines Act for more than one mine). The court will investigate and decide on any such case, following as near as may be the procedure laid down in the foregoing instructions.

11. *Review on application of military representative.*

- (i) The military representative may at any time apply, by sending notice in the prescribed form in duplicate to the court, for the withdrawal or variation of a certificate granted in respect of a person employed at a coal-mine.
- (ii) Such an application may be made upon either of the following grounds :
 - (a) That it is no longer necessary in the national interests that the man should continue in civil employment.
 - (b) That the man's principal and usual occupation has, since the certificate was granted, ceased to be the occupation specified in the certificate.
- (iii) Upon receiving notice of application for the withdrawal or variation of a certificate duly made, the court shall forward the duplicate notice of application to the holder of the certificate and shall fix the date for the hearing of the application.
- (iv) Not less than three clear days before the date fixed, notice in writing shall be sent to the military representative and to the man with respect to whom the question has been raised, and to his employer, of the date and place fixed for the consideration of the question, and with the notice there shall be sent particulars of the question to be raised.
- (v) The man with respect to whom the question has been raised, or his representative, the employer or his representative, and the military representative shall have the right to be present at the hearing of the case by the court and to be heard.

- (vi) If upon the hearing of the application the court are of opinion that in the circumstances of the case the certificate should be withdrawn or varied, the court shall accordingly withdraw or vary the certificate, as the case may be.
- (vii) A record of the decision of the court upon a case shall be entered on the notice of application, and a register of cases shall be kept in the prescribed form.

12. *Renewal of temporary certificate.* Application for the renewal of a certificate of exemption shall be made to the court of the area in which the holder of the certificate is employed before or within two months after the date on which the certificate ceases to be in force. The application shall be made in duplicate on the prescribed form, and shall be dealt with in the same manner as an application for the grant of a certificate.

13. *Appeals.* If any of the parties concerned is dissatisfied with the decision of the court in any case, the court may, if application is made to the court on the prescribed form within five days after the decision of the court, and the court is of opinion that a question of principle or any important issue is involved, grant leave to appeal to the Central Colliery Recruiting Court. If leave to appeal is granted, the court shall forward forthwith to the central court the notice of appeal and the other documents relating to the case, and a statement of the question at issue and of the grounds of their decision.

14. Where the holder of a certificate ceases to be employed in the occupation specified in the certificate, or where the holder of a certificate dies, the certificate shall be returned to the court.

15. If it is shown to the satisfaction of the court that a certificate of exemption has been destroyed or defaced, or is missing, the court shall, upon the application of the man to whom the certificate was granted, and upon payment by him of a fee of one shilling, issue to the man a duplicate of the certificate of exemption.

HOME OFFICE,

11th February 1916.

APPENDIX VI

LETTER TO THE SECRETARY OF THE MINERS' FEDERATION OF GREAT BRITAIN, 11TH APRIL 1916¹

THE present position in respect of the demand for coal and the outlook for the immediate future were considered at a meeting of the Coal-mining Organization Committee held at the Home Office on Thursday last. The situation is very serious, and the Committee are unanimous that it is of vital importance that every effort should be made to increase the output. They feel, therefore, that the time has come when it is necessary to

¹ Reprinted by permission of the Controller of His Majesty's Stationery Office.

reconsider the advisability of adopting schemes for increasing the output of coal which they have had before them from time to time, and have either adjourned or negatived. The Committee accordingly authorized me to write to you and ask you to bring before the Executive of the Miners' Federation of Great Britain, at the earliest possible moment for their consideration, the various methods by which an increase of output might be obtained.

As you are aware, the decrease in output for the first twelve months of the War was about 30 million tons, and the monthly rate of increase at the present moment shows no improvement.

Largely owing to the demand of the works engaged in the manufacture of munitions of war, the demand for coal for home consumption is not only greater than it has been since the outbreak of war, but is increasing, and before the end of the present year will be very heavy.

The demands of the Admiralty are no less than they have been throughout the War, whilst those of the Allies are considerably greater than they have been, and are still increasing. The demands from France alone are more than doubled.

In order to meet the home demands, export has been dangerously reduced, and not only must not suffer further reduction, but means must be sought to increase it. We would remind you that, apart altogether from meeting the requirements of the Allies, we must send coal to Norway and Sweden in exchange for pit props and certain special kinds of iron and steel necessary in the manufacture of munitions of war; to Denmark and Holland in exchange for agricultural and dairy produce; to Spain for sulphur, copper, and iron ore; to South America for grain and agricultural produce.

I have said nothing as to the importance of the export of coal. Both as to helping to pay for the War and as a means of keeping up the rate of exchange, coal is our largest and most important export.

In these circumstances may I ask the most careful consideration by your executive of the possibilities, to which I will now refer, of increasing the output of coal. I mention these, not in their order of importance, but in that in which they were dealt with in the first report of the Coal-mining Organization Committee.

The further employment of women on the surface of the collieries. In our first report we came to the conclusion not to recommend that any action should be taken at the present time with a view to the more extensive employment of women on the surface of coal-mines. But after reviewing the whole situation outlined above, the Committee on Thursday last unanimously agreed that 'Owing to the paramount necessity of meeting the irreducible demands for home consumption and export of coal, it may be necessary and practicable in some districts to further employ women in the performance of suitable labour on the surface of collieries, and that although in many quarters there appears to be a strong feeling

on the part of the owners and workmen alike against the further adoption of female labour, the Committee is of the opinion that the representatives of both sides should meet and discuss as to what action, in their opinion, should be taken in the district'. It was further agreed, 'if any increase of such labour is adopted, it should continue only for the period of the War, and that proper and adequate arrangements be made on the premises for the health and comfort of the women employed'.

Reduction of age limit for boys (Section 92 of the Coal-mines Act, 1911). To allow of (a) boys being employed below ground between the ages of 13 and 14 years; (b) boys employed on the surface working between the hours of 9 p.m. and 5 a.m. The Act allows of their doing so below ground, but not on the surface. We are informed that at some collieries this would afford some measure of relief, in that it would relieve some men for underground work.

Both or either of these measures would necessitate alterations in the Coal-mines Act during the period of the War.

On the information before us, no general relaxation of this kind is necessary, but there are some cases where shortage of labour is acute, and relief might possibly be obtainable in this way.

Absenteeism. The efforts which have been made by the leaders of the miners to reduce absenteeism have met with a considerable measure of success, but there is a wide difference between the different districts in the amount of absenteeism, and the evidence shows that there is a proportion, though probably not a large one, of men who are habitually idle for two or three days a week.

The Committee have estimated that were there no avoidable absenteeism, the output would be increased to the extent of between 13 and 14 million tons per annum. Reduction of absenteeism is by far the best means of increasing the output. Is it too much to hope that an additional 10 million tons per annum may be secured by this means? We feel sure that the miners have only to realize that upon their efforts the success of the country depends, no less than upon the men who are serving with the Forces, to secure a considerable enhancement of output. The difficulty is to bring this truth home to them.

At some collieries Committees of the workmen have been established to deal with absenteeism, and the extension of this system seems very desirable. It certainly does not seem right that a man should be exempted from the obligation of military service on the ground of his employment in a coal-mine, and yet be unwilling to give the full service which the national need requires.

Further utilization of the one hour per day for sixty days per year (Section 1 of the Eight Hours' Act). In most districts advantage is taken of this provision to commence work earlier on certain days, so as to come out earlier, usually at week-ends, or for changing shifts, &c., but there are doubtless some places where advantage might be taken of the one hour on sixty days for the purposes of getting coal.

Suspension of the Eight Hours' Act. At the joint conference of representatives of the coal-owners and workmen, held at the Home Office on the 2nd of September last, it was decided not to advocate the suspension of the Eight Hours' Act, but it was realized that the time might come when the nation's needs became more acute, and some action would be necessary. It is clear that the question should be reviewed, with the object of determining whether, and, if so, to what extent, the Act should be suspended in individual districts, e. g. that is to what class of labour the suspension should apply, and the additional time to be worked. Perhaps the best way of meeting the matter would be by a joint conference of the representatives of the owners and workmen.

Holidays. I trust it may be found possible to curtail the holidays in the same way as was done last year, and so considerably augment the output.

The Coal-mining Organization Committee stated in their first report that the basis of all proposals and suggestions made by the Committee is harmonious co-operation between the employers and employed through the medium of the organizations on both sides thoroughly representative of the parties, and it is in this spirit that the Committee now approaches the Miners' Federation of Great Britain and asks their earnest consideration of the points raised in this letter.

In conclusion, permit me to remind you of the resolution which was unanimously carried at the great and historic national conference of representatives of the mining industry in London on the 29th of July last, viz. : 'That in the opinion of this meeting, representative of the coal-mining industry of Great Britain, every effort should be made by the owners and workmen alike to secure the greatest possible output of coal in the interest of the nation during the period of the War.'

APPENDIX VII

THE COAL TRANSPORT ORDER, 1917¹

Directions of the Controller of Coal-mines, dated the 4th July 1917, for the purpose of Re-organizing the Transport of Coal by Public Railway for Inland Consumption.

Issued under Section 3 of the Coal Transport Order, 1917, made by the Board of Trade under Regulations 2 F to 2 JJ and 9 G of the Defence of the Realm Regulations.

1. No person shall, after the 8th September 1917, without the consent of the Controller of Coal-mines, buy or sell, or offer to buy or sell, coal to be forwarded by public railway for inland consumption to any area other than those to which the coal in question may be so forwarded under the Coal Transport Re-organization Scheme, as set out in these directions.

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2. For the purpose of the afore-mentioned scheme, Great Britain has been divided into areas numbered from 1 to 20 on two maps¹ of England and Wales and of Scotland respectively, and the following table shows the area to which coal produced in each of the areas specified in the first column may be forwarded by public railway for inland consumption for the purposes indicated in the second, third, and fourth columns :

Area of production	Areas to which the forwarding of coal by public railway for inland consumption is confined by these directions		
	Steam and manufacturing	Gas and coking	House
No.	Area No.	Area No.	Area No.
1. Northumberland . . .	1, 2, 3	1	1, 2
2. Cumberland . . .	2	2	2
3. Durham . . .	2, 3	2, 3	2, 3
4. Lancashire . . .	4, 6	4	4
5. Yorkshire . . .	3, 4, 5, 7, 8, 10, 11, 14, 16	4, 5, 7, 8, 10, 11, 13, 14, 16	4, 5, 7, 8, 10, 11, 14, 16
6. North Wales . . .	6	6	6
7. North Stafford . . .	6, 7, 9	7, 9, 10	6, 7, 9
8. Eastern Counties . . .	—	—	—
9. Shropshire . . .	9, 12, 13	9, 13	9, 12, 13
10. Birmingham and District .	9, 10, 11, 13, 14	—	9, 10, 11, 13, 14
11. Northants to Essex . . .	—	—	—
12. South Wales and Monmouthshire . . .	12, 13, 14	12	12, 13
13. South-western Counties .	13	13	13
14. South-eastern Counties and London . . .	14	14	14
15. Derby and Nottingham .	4, 6, 7, 8, 10, 11, 13, 14, 15, 16	4, 7, 8, 10, 11, 14, 15, 16	4, 6, 7, 8, 11, 14, 15, 16
16. Leicester . . .	10, 11, 14, 16	—	10, 11, 14, 16
SCOTLAND			
17. South Eastern . . .	17	17	17
18. North Western . . .	18	18	18
19. North Eastern . . .	17, 18, 19	19	17, 18, 19
20. South Western . . .	18, 20	20	20

3. In accordance with the provisions of Sections 2 and 3 of the Coal Transport Order, 1917, every contract for the sale of coal is hereby abrogated as from 6 p.m. on the 8th September 1917, in every case in which

¹ Copies of these maps, also a diagram illustrating the effect of the scheme on the area interchanges, have been prepared by the Railway Clearing House, and may be obtained, with a pamphlet embodying full instructions, by all concerned, post free, on application to the Secretary, Railway Clearing House, 123 Seymour Street, London, N.W. 1.

this is necessary, in order that the re-allocation of the supplies of coal, as provided for in clause 6 of these directions, may be effected.

[On and from the 10th of September, new contracts for the sale of coal affected by the scheme will come into operation, and all necessary arrangements to this end must be completed not later than the 8th of September, but it is obviously desirable that completion should be reached as much in advance of that date as possible.]

4. Every colliery owner shall, on receipt of instructions from the District Coal and Coke Supplies Committee in whose area the colliery is situated, furnish the Committee with returns giving the following information as respects forwardings by public railway, for inland consumption during June 1917, of each description of coal produced at the colliery :

- (a) In the case of coal sold direct to consumers or retail merchants, the name and address of the consumer or retail merchant, and the tonnage of each description forwarded by rail to each in the area specified by the Committee, for each of the following purposes : (a) steam-raising and manufacturing, (b) gas-making, (c) coke ovens, (d) household use.
- (b) In the case of coal sold to factors and wholesale merchants, the name and address of the factor or wholesale merchant and the tonnage of each description forwarded by rail to each in the areas specified by the Committee, for each of the following purposes : (a) steam-raising and manufacturing, (b) gas-making, (c) coke ovens, (d) household use.
- (c) In the case of every consignment of coal during June, the destination of which was unknown to the colliery owner, the name, address, and business of the purchaser and the weight and description of each consignment.
- (d) Such information as to the provision of wagons as the Committee may require.

Every colliery owner shall furnish the above returns to the District Coal and Coke Supplies Committee, so as to be in the hands of the Committee within seven days of the date of the dispatch of the instructions by the Committee to the collieries in their area.

5. In every case in which the area of consumption of coal sold to a factor or merchant is unknown to the colliery owner, the District Coal and Coke Supplies Committees will apply to every such factor or merchant for a statement giving, as respects such coal, the tonnage of each description forwarded by rail for consumption in each of the areas as referred to in clause 4 of these directions, for each of the purposes named therein : (a) steam-raising and manufacturing, (b) gas-making, (c) coke ovens, (d) household use, and every such factor or merchant shall furnish such return to the Committee so as to be in their hands within three days of the date of application.

In cases where coal is sold by one factor or merchant to another, and

the area of consumption of the coal is unknown to the seller, the seller shall state on the above-mentioned return the name and address of the purchaser and the weight and description of coal in each case.

6. On receipt of the returns specified in clause 4, the District Coal and Coke Supplies Committees will arrange for meeting the requirements of purchasers whose supplies have been affected by the scheme, out of the tonnage of coal which will be available and sufficient for the purpose, by diversion from other areas under the operation of the scheme. This tonnage will consist of the following :

- (a) The tonnage of coal hitherto forwarded by public railway from the areas specified in the first column of the table shown in clause 2 of these directions, to areas other than those specified in the second, third, and fourth columns as permissible areas for the coal in question.
- (b) Such portion of the tonnage hitherto forwarded to other areas as it may be necessary for the Committee to divert under detailed instructions from the Controller of Coal-mines.

The District Coal and Coke Supplies Committees will inform each of the colliery owners in their area of the tonnages (if any) to be diverted from these areas, and will specify the factors, merchants, and direct consumers, whose supplies are to be reduced or discontinued, with the descriptions and quantities of coal to be diverted from each.

7. The whole tonnage of coal diverted under the operation of the scheme as mentioned in clause 6 shall be reserved by the collieries for disposal in accordance with instructions to be given by the District Coal and Coke Supplies Committee, who will notify each colliery owner in their area of the factors, merchants, and direct consumers to whom the coal is to be supplied after the 8th of September 1917, and of the descriptions and quantities to be supplied to each.

8. The collieries will then communicate direct with the factors, merchants, and direct consumers allotted to each, and in offering the authorized weight and description of coal will, at the same time, state whether wagons can be supplied by the colliery. If the colliery is unable to provide wagons, or can provide only a portion of them, this must be stated when offering the coal, and the factors, merchants, and direct consumers asked if they can provide wagons.

In cases where factors, merchants, and direct consumers state they are unable to provide wagons, the colliery must at once notify this, with full particulars, to the District Coal and Coke Supplies Committee, who will then endeavour to arrange for supplies of wagons, and if unable to do so, report the circumstances to the Controller of Coal-mines. It must, however, be understood that where factors, merchants, and direct consumers are to-day providing the wagons for the existing supplies which are to be discontinued as from the 8th of September, under the instructions of the District Committee, they must continue to provide wagons for the new

supplies substituted by the Committee, except in cases where the collieries indicate their ability to meet demands with their own wagons or those of railway companies.

9. Every colliery shall notify all factors, merchants, and direct consumers to whom coal has been sold, the delivery of which will be affected by the scheme, of the discontinuance or reduction of supplies as from the 8th September 1917. Such notifications shall be made :

- (a) In the case of coal forwarded to areas prohibited under clause 2 of these directions, as soon as possible after the publication of these directions :
- (b) In the case of coal forwarded to other areas in reduced quantities, as soon as possible after the receipt of instructions from the District Coal and Coke Supplies Committee as to the factors, merchants, and direct consumers whose supplies will be affected.

10. These directions are designed so as to leave the initiative with the District Coal and Coke Supplies Committees. Factors, merchants, and direct consumers whose supplies after the 8th September 1917 are affected by the scheme are not to apply to collieries for supplies in substitution, but must wait until they receive communications from such collieries as are instructed by the District Coal and Coke Supplies Committees to provide the supplies required under the scheme. Provided that if any factor, merchant, or direct consumer does not hear from a colliery or collieries respecting such supplies as affected under the scheme by the 27th of August, a communication shall at once be sent to the District Committee controlling the area, responsible for supplying such factor, merchant, or direct consumer, furnishing details of the quantities and description of coal required, together with the names of collieries from whom such supplies were actually drawn, and would continue to be drawn up to 6 p.m. on the 8th September 1917. Also that if a colliery has not, by the 20th August 1917, received particulars of the allocation of its coal which is being displaced under the scheme it shall, on that date, communicate with the District Coal and Coke Supplies Committee concerned.

11. The Controller of Coal-mines will furnish the District Coal and Coke Supplies Committees with information regarding the present distribution of certain special descriptions and qualities of coal which are required for certain purposes, such as for coke ovens, gas producers, and automatic stokers, and the names of firms who are entitled to priority in respect of their requirements of such fuel. Such firms will receive certificates issued by the Controller of Coal-mines entitling them to receive specified supplies of the special fuels mentioned in the certificate, and the Committees will take steps to provide the fuel in question, by diversion where necessary, from firms who have not received certificates.

Every person shall comply with the instructions of the District Coal and Coke Supplies Committees with regard to the distribution of descriptions and qualities of coal which it may be necessary to deal with as special fuels under this clause.

12. These directions do not affect :

- (a) Coal conveyed to port for shipment, whether for export, coastwise, or bunkers.
- (b) Coal conveyed otherwise than by public railway from the colliery.
- (c) Anthracite.

In the case of rail-borne coal transhipped for delivery by barge or to be delivered by road vehicle, the point to which the traffic is forwarded by public railway is to be regarded as the destination for the purpose of complying with these directions.

13. These directions may be revoked or varied by the Controller of Coal-mines as occasion arises.

APPENDIX VIII¹

FORM OF MONTHLY AND QUARTERLY RETURNS MADE BY COLLIERY OWNERS TO THE FINANCE BRANCH OF THE CONTROL

Form 'A'.

Monthly report for { the calendar month } ended.....191
 { the four weeks }

N.B.—The Coal Disposal Account and Coal Raising Costs must cover identical periods.

Name of Owner :

Mine :

SECTION I.—Coal Disposal Account.

	<i>Weight, Tons</i>	<i>Detail</i>	<i>Total</i>	<i>Average selling price</i>
1. Sales to customers . . .				
<i>Less</i> delivery charges . .				
2. Deliveries to other depart- ments at current prices				
<i>Less</i> delivery charges . .				
3. Workmen's coal :				
(A) Sales				
(B) Free				
4. Mine consumption and loss at estimated value				
5. Total sales (being the total of Nos. 1 to 4)				
6. Average selling price per ton				

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SECTION II.—Coal Raising Costs.

Divisor.....Tons Raised.

	Detail			Total			Cost per ton	
7. Underground cost :								
Wages, including workmen's compen- sation and national insurance .								
Timber and pit wood								
Other materials and stores								
8. Royalty and wayleaves								
9. Mine consumption and loss, per contra .								
10. Surface cost :								
Wages, including workmen's compen- sation and national insurance .								
Materials and stores								
Power								
11. Management and general charges :								
Rates								
War allowances, including value of houses, rents, and coal allowed to dependents of workmen								
Management and other charges at colliery (excluding depreciation and income tax, but taking into account any debit or credit for rents paid or received)								
12. Total cost into trucks, &c., at pit head (being the total of Nos. 7 to 11) .								
13. Head office and selling charges								
14. Coal purchased included in above sales								
15. Stock adjustments. Add or deduct difference in stock as per Section V								
16. Cost of coal sold (being the total of Nos. 12 to 15)								
17. Profit or loss (being the difference be- tween Nos. 5 and 6)								

SECTION III.—Particulars of Output.

Days worked	
Total tons raised	
Average tons raised per day	

SECTION IV.—Cash Transactions for the Period.

Balance at .				Overdraft at			
Receipt on				Payments on			
Working				Working			
Account .				Account .			
Other receipts				Distribution			
				of profits .			
				Repayment			
				on loans .			
				Other pay-			
				ments .			
Overdraft at end .				Balance at end			
of period . . .				of period . . .			
£				£			

N.B.—This Section does not apply to Composite Companies carrying on in connection with the collieries other industries which are under the control of the Ministry of Munitions.

SECTION V.—Stock Adjustment.

	<i>Tons</i>	<i>Per ton</i>	<i>Amount</i>		
Stock of coal at beginning of month, of estimated value					
Stock of coal at end of month, of estimated value .					
Increase or decrease carried to No. 15 . . .					

SECTION VI.—Particulars of New Work, showing cost and whether charged to Capital or Revenue.

Certificate: We certify that the information contained in the foregoing Sections Nos. 1 to 6 inclusive is correct to the best of our knowledge and belief.

..... Accountant.

..... Secretary.

..... Date.

N.B.—The information contained in this form will be considered as confidential, and available solely to the various departments of His Majesty's Government. Under no circumstances will any of the information be disclosed to other coal-owners, or to the miners or their representatives.

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MONTHLY AND QUARTERLY RETURNS

SECTION II.—Coal Costs.

	Detail			Total			Per ton of saleable coal raised. Heading 42	
	£	s.	d.	£	s.	d.	s.	d.
8. Wages.								
A. Underground :								
(a) Coal getting								
(b) Haulage								
(c) Repairs								
(d) Development								
(e) Other underground wages .								
B. Surface.								
(a) Development								
(b) Washery (if not at colliery and not excluded from provisions of agreement)								
(c) Other surface (including washery if situated at colliery and not excluded from provisions of agreement)								
Total wages								
Deduct :								
C. War wage (underground and surface) chargeable to Board of Trade as shown in Form G (c), item C .								
Net wages								
9. Workmen's insurance and compensation :								
(a) Workmen's compensation insurance								
(b) National health and unemployment insurance								
(c) All other payments on account of uninsured risks								
10. Timber and pit wood (or substitutes) consumed								
(a) Pit wood and other mining timber								
(b) Substitutes for pit wood, &c. .								
11. Other materials and stores consumed, including spare parts for machinery repairs, loose plant, horses, and horse-keep								
12. Suspense account—amount written off								
13. Purchased coal and power consumed :								
(a) Purchased coal. Tons								
(b) Purchased power. Units								

Coal Costs (*continued*).

	<i>Detail</i>			<i>Total</i>			<i>Per ton of saleable coal raised. Heading 42</i>	
	£	s.	d.	£	s.	d.	s.	d.
14. Mine rent, royalties, and wayleaves .								
15. Management and general charges at colliery :								
(a) Rates and insurance								
(b) War allowances								
(c) Salaries								
(d) Office and general expenses .								
Deduct (e) war bonus chargeable to Board of Trade as shown on Form G (c), item G								
16. Total cost into trucks, &c. (total of Nos. 8 to 15)								
17. Coal purchased for sale (at cost), tons								
18. Cost of saleable coal (total of Nos. 16 and 17)								
19. Gross profit or loss on colliery (difference between Nos. 7 and 18 carried to Section III)								

SECTION III.—Profit and Loss Account.

PART A				<i>Detail</i>			<i>Total</i>		
							£	s.	d.
19. Gross profit or loss on colliery (brought from Section II)									
20. Wagon revenue account—balance									
21. Profit on farms (estimate)									
22. Discount receivable									
*23. Cottage and other rents (after deduction of rents payable and expenses)									
24. Other credits, viz. :									
(a)									
(b)									
(c)									
(d)									
*25. Interest received									
26. Total									
27. Gross profit on purchased coal									
28. Dépôts—profit or loss									
†29. Investment income									
30. Total									

* Apportioned amount in the case of composite undertakings.

† Not to be filled up by composite undertakings.

Profit and Loss Account (*continued*).

PART B	Detail			Total		
				£	s.	d.
*31. Selling and administration expenses, comprising :						
Discounting, bad debts, salaries and commissions, and travelling expenses						
(a) Directors' fees						
(b) General Manager's salary						
(c) Other salaries						
(d) Head office and general expenses						
Deduct :						
(e) War bonus chargeable to Board of Trade as shown in Form G (c), item G						
*32. Depreciation (as allowed for income tax) :						
(a) Plant and machinery						
(b) Wagons						
33. Other debits, viz. :						
(a)						
(b)						
(c)						
(d)						
*34. Interest payable (estimated) :						
(a) On loans						
(b) On debentures						
35. Total of Nos. 31 to 34						
36. Net profit or loss (being difference between Nos. 30 and 35)						

* Apportioned amount in the case of composite undertakings.

SECTION VI.—Cash Transactions for the Period.

N.B.—This Section does not apply to composite undertakings carrying on in connection with the collieries other industries which are not subject to the coal-mines and control agreement.

Balance at	<table><tr><td></td><td></td><td></td></tr></table>				Overdraft at	<table><tr><td></td><td></td><td></td></tr></table>			
Receipt on Working Account	<table><tr><td></td><td></td><td></td></tr></table>				Payments on Working Account	<table><tr><td></td><td></td><td></td></tr></table>			
Receipt on Capital Account	<table><tr><td></td><td></td><td></td></tr></table>				Distribution of profits	<table><tr><td></td><td></td><td></td></tr></table>			
Other receipts, namely :	<table><tr><td></td><td></td><td></td></tr></table>				Repayment of loans	<table><tr><td></td><td></td><td></td></tr></table>			
	<table><tr><td></td><td></td><td></td></tr></table>				Other payments, namely :	<table><tr><td></td><td></td><td></td></tr></table>			
	<table><tr><td></td><td></td><td></td></tr></table>					<table><tr><td></td><td></td><td></td></tr></table>			
Overdraft at end of period	<table><tr><td></td><td></td><td></td></tr></table>				Balance at end of period	<table><tr><td></td><td></td><td></td></tr></table>			
£	<table><tr><td></td><td></td><td></td></tr></table>				£	<table><tr><td></td><td></td><td></td></tr></table>			

Certificate : We certify that the information contained in the foregoing Sections, Nos. I to VI, inclusive, is correct to the best of our knowledge and belief.

..... Secretary. Accountant.
Date 191 . Date 191 .

N.B.—The information contained in this form will be considered as confidential, and will be used only for the purposes of H.M. Government or the Department thereof. In no circumstances will any of the information be disclosed to any other colliery owners, or to the miners or their representatives.

INCREASE IN COAL-MINERS' WAGES FROM THE BEGINNING OF THE WAR UP TO AND
INCLUDING THE 1ST AUGUST 1917

District	Percentage of hewers' wages above standard on 31st July 1914	Date of change	Amount of increase (+) or decrease (—) on standard rates		Percentage of hewers' wages above standard on 1st August 1917		Date of standard	
Cumberland.	62½%	{ Oct. 1914 Dec. 1915 Mar. 1916 May 1916 }	+ 2½%		65%		1879 1911 *	
			Old std.	New std.	Old std.	New std.		
			+ 7½%	+ 5%	72½%	15%		
			+ 7½%	+ 5%	80%	20%		
		+ 5%	+ 3% †	85%	23%			
		{ Feb. 1917 }	On wages then existing + 13%		118·3%		45·5%	
	+ 4·2% †							
	Northumberland.	50%	{ Jan. 1915 May 1915 April 1915 July 1915 Oct. 1915 Jan. 1916 April 1916 July 1916 Oct. 1916 Jan. 1917 }	— 3%		120%		1879
				+ 15% †				
				+ 1%				
+ 2%								
+ 18%								
— 5%								
+ 12%								
+ 22%								
+ 19%								
— 11%								

* This standard, which was based on the existing wages in Dec. 1911, was 50% above the 1879 standard.

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† War bonus.

INCREASE IN COAL-MINERS' WAGES, ETC. (continued)

District	Percentage of heavers' wages above standard on 31st July 1914	Date of change	Amount of increase (+) or decrease (—) on standard rates	Percentage of heavers' wages above standard on 1st August 1917	Date of standard
Durham.		<div> <div>Nov. 1914</div> <div>May 1916</div> <div>Nov. 1915</div> <div>Aug. 1915 †</div> <div>Feb. 1916</div> <div>May 1916</div> <div>Aug. 1916</div> <div>Nov. 1916</div> </div>	<div> <div>— 33¼%</div> <div>+ 15% *</div> <div>+ 6¼% †</div> <div>—</div> <div>+ 33¼%</div> <div>+ 10%</div> <div>+ 13¾%</div> <div>+ 5%</div> </div>	107½%	1879
	57½%				
Federated districts.	65% (on 1888 standard)	<div> <div>May 1915</div> <div>Dec. 1915</div> <div>Mar. 1916</div> <div>June 1916</div> <div>Feb. 1917</div> </div>	<div> <div>+ 25.575% §</div> <div>+ 7.5% ||</div> <div>+ 7.5% ||</div> <div>+ 5% ||</div> <div>+ 4.2%</div> </div> <div>(On the current wages)</div>	118.3 on 1888 standard = 45.5% above 1911 standard	1911 ¶
Radstock.	52½%	<div> <div>Oct. 1914</div> <div>Mar. 1915</div> <div>April 1915</div> <div>May 1915</div> <div>Oct. 1915</div> <div>Dec. 1915</div> <div>April 1916</div> <div>June 1916</div> <div>Aug. 1916</div> <div>Sept. 1916</div> <div>Feb. 1917</div> <div>April 1917</div> </div>	<div> <div>+ 2½%</div> <div>— 2½%</div> <div>+ 2½%</div> <div>+ 15% *</div> <div>+ 2½%</div> <div>+ 7½%</div> <div>+ 7½%</div> <div>+ 5%</div> <div>— 2½%</div> <div>+ 2½%</div> <div>+ 7½% ¶</div> <div>— 2½% ¶</div> </div>	92½% (above 1888 stand- ard) = 28½% (above new standard)	New stand- ard **
				97½% (above 1888 stand- ard) = 31½% (above new standard)	

* War bonus.

† The nominal increase was 11½%, but 5% was merged in the war bonus.

‡ This increase was given as a war bonus of 15½% on present wages.

§ A new standard, known as the 1911 standard, was adopted in 1915. This was 50% above the 1888 standard.

¶ These figures were the equivalent increases on the old standard of 1888.

** The new standard is 50% above the 1888 standard.

† Increase of 10% merged in the war bonus.

Bristol.	Gloucestershire side 52½%	<div>Oct. 1914</div> <div>Mar. 1915</div> <div>April 1915</div> <div>May 1915</div>	<div>+ 2½%</div> <div>— 2½%</div> <div>+ 2½% *</div> <div>+ 15% *</div>	Gloucestershire side 97½% (above 1888 standard = 31⅔% above new standard)	1888
	Somersetshire side 57½%	<div>Oct. 1915</div> <div>Dec. 1915</div> <div>April 1916</div> <div>June 1916</div> <div>Sept. 1916</div> <div>Oct. 1916</div> <div>Feb. 1917</div> <div>April 1917</div>	<div>+ 2½%</div> <div>+ 7½%</div> <div>+ 7½%</div> <div>+ 5%</div> <div>— 2½%</div> <div>+ 2½%</div> <div>+ 7½%</div> <div>— 2½%</div>	Somersetshire side 102½% (above 1888 standard = 35% above new standard)	New standard
Forest of Dean.	<div>35%</div> <div>40%</div>	<div>Dec. 1914</div> <div>Jan. 1915</div> <div>Feb. 1915</div> <div>July 1916</div> <div>Sept. 1916</div>	<div>+ 5%</div> <div>+ 5%</div> <div>+ 15% *</div> <div>+ 10% †</div> <div>+ 10% †</div>	<div>80</div> <div>85</div>	1888
South Wales.		<div>May 1915</div> <div>Aug. 1915</div> <div>Dec. 1915</div> <div>June 1916</div> <div>Dec. 1916</div>	<div>+ 17½% *</div> <div>+ 18·75% †</div> <div>— 7·5% †</div> <div>+ 22·5% †</div> <div>+ 22·5% †</div>	<div>133·75% (above 1879 standard) = 55·83% (above 1915 standard)</div>	<div>1879</div> <div>1915 §</div>
Scotland.	75%	<div>May 1915</div> <div>June 1915</div> <div>Aug. 1915</div> <div>Nov. 1915</div> <div>April 1916</div> <div>June 1916</div> <div>Aug. 1916</div>	<div>+ 18¾% *</div> <div>+ 12½% ||</div> <div>+ 6¼%</div> <div>+ 6¼%</div> <div>+ 6¼%</div> <div>+ 12½%</div> <div>+ 12½%</div>	150%	1888

* War bonus.
† These two advances were outside the agreement as there was no corresponding advance in prices.
‡ These figures are the equivalent of the old standard of 1879.
§ A new standard was adopted in July 1915. This was 50% above the standard of 1879.
|| An increase of 3¼% was substituted for the war bonus of 18¼% previously granted, and the net increase was therefore 12¼%.

APPENDIX X¹

COAL SETTLEMENT TERMS

TEXT OF AGREEMENT, JULY 1921

THE 'Terms of Settlement' of the coal dispute were issued by the Board of Trade as follows :

1. A National Board shall be constituted forthwith, consisting in equal numbers of persons chosen by the Mining Association of Great Britain and persons chosen by the Miners' Federation of Great Britain.

There shall also be established District Boards, consisting in equal numbers of persons representing owners and workmen in each district.

The National and District Boards shall draw up their own rules of procedure, which shall include a provision for the appointment of an independent Chairman for each Board.

2. The wages payable in each district shall be expressed in the form of a percentage upon the basis rates prevailing in the district, and shall be periodically adjusted in accordance with the proceeds of the industry as ascertained in such district.

3. The amount of the percentage to be paid in each district during any period shall be determined by the proceeds of the industry in that district during a previous period, as ascertained by returns to be made by the owners, checked by joint test audit of the owners' books carried out by independent accountants appointed by each side.

4. The sum to be applied in each district to the payment of wages above the standard wages as hereinafter defined shall be a sum equal to 83 per cent. of the surplus of such proceeds remaining after deduction therefrom of the amounts of the following items during the period of ascertainment :

- (a) The cost of the standard wages ;
- (b) The costs of production other than wages ;
- (c) Standard profits equivalent to 17 per cent. of the cost of the standard wages ;

and the share of the surplus applicable to wages shall be expressed as a percentage upon the basis rates prevailing in the district.

Provided that if in any period the ascertained proceeds, after deduction of costs other than wages and the cost of the standard wages, prove to have been insufficient to meet the standard profits, the deficiency shall be carried forward as a first charge to be met out of any surplus, ascertained as above, in subsequent periods.

5. If the rates of wages thus determined in any district do not provide a subsistence wage to low-paid day wage workers, such additions in the

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form of allowances per shift worked shall be made for that period to the daily wages of these workers as, in the opinion of the District Board, or, in the event of failure to agree by the parties, in the opinion of the Independent Chairman, may be necessary for the purpose. Such allowances shall be treated as items of cost in the district ascertainment.

6. For the purpose of these periodical adjustments the units shall be the districts set out in the schedule hereto, and shall only be varied by the decision of the District Board or boards concerned, provided that no variation shall take place prior to the 1st February 1922, in the grouping of any district unless it is mutually agreed by the representatives of both sides in the district or districts concerned.

7. The standard wages shall be the district basis rates existing on the 31st March 1921, *plus* the district percentages payable in July 1914 (or the equivalents in any district in which there has been a subsequent merging into new standards), *plus*, in the case of piece workers, the percentage additions which were made consequent upon the reduction of hours from eight to seven.

8. In no district shall wages be paid at lower rates than standard wages, *plus* 20 per cent. thereof.

9. The National Board shall forthwith consider what items of cost are to be included for the purposes of paragraph 4 (*b*) above, and in the event of agreement not being arrived at by the 31st of July, the matter shall be referred to the Independent Chairman for decision.

10. The wages payable by the owners up to the 31st of August inclusive shall be based upon the ascertained results of the month of March, and the wages payable during September shall be based upon the ascertained results of the month of July. The periods of ascertainment thereafter shall be decided by the National Board.

11. During the 'temporary period', as hereinafter defined, the following special arrangements shall apply in modification of the general scheme set out above :

(a) In calculating the proceeds for March the deduction to be made in respect of costs other than wages shall be the average of such costs during January, February, and March.

(b) In any district in which reductions in wages continue to be made after the first ascertainment, no part of the surplus proceeds shall be assigned to profits if and in so far as this would have the effect of reducing the wages below the level in the preceding month.

When in any district there is a break in the continuity of reductions in wages upon the periodical ascertainments, at that point and thereafter the general scheme shall apply fully in regard to owners' surplus profits.

(c) The proviso to paragraph 4 regarding the carrying forward of

deficiencies in standard profits shall not apply, but any net losses shall be so carried forward.

(d) The Government will give a grant not exceeding £10,000,000 in subvention of wages.

(e) This subvention shall be available for making such increases to the wages otherwise payable in any district as may be necessary to prevent the reductions below the March rates of wages being greater than the following amounts :

During July, 2s. a shift for persons of 16 years of age and upwards and 1s. a shift for persons under 16.

During August, 2s. 6d. and 1s. 3d. respectively.

During September, 3s. and 1s. 6d. respectively, provided that the balance of the subvention is sufficient for this purpose.

(f) In any district in which in any month the proceeds available for wages, calculated in accordance with the terms of this settlement, are sufficient to admit of a rate of wages equal to or higher than the rate payable under the maximum reduction for that month, the wages payable by the owners shall be calculated not in terms of basis *plus* percentage, but on the same basis as during March, less flat-rate reductions uniform throughout the district for persons of 16 years of age and upwards and persons under 16 years of age respectively.

(g) In any district in which the wages calculated in accordance with the terms of this settlement are less than the wages payable under the maximum reductions aforesaid, the difference shall be met by the owners in that district during September to the extent of the aggregate net profits realized by them on the district ascertainment for July, and during October to the extent of the aggregate net profits realized by them on the district ascertainments for July and August.

(h) The expression 'temporary period' means the period from the date of the resumption of work to the 30th September 1921.

12. The period of duration of this agreement shall be from the date of resumption of work until the 30th September 1922, and thereafter until terminated by three months' notice on either side.

13. It is agreed as a principle that every man shall be entitled to return to his place when that place is available for him, and that men temporarily occupying places during the stoppage shall give way to men working in those places before the stoppage.

It is agreed that, on the other hand, there shall be no victimization of men who have been keeping the collieries open, not in the sense that they are to remain at the jobs they filled during the stoppage, but that they shall not be prevented from going back to their own jobs or from working subsequently at the colliery.

SCHEDULE REFERRED TO

Scotland ; Northumberland ; Durham ; South Wales and Monmouth ;
Yorkshire, Nottinghamshire, Derbyshire, Leicestershire, Cannock Chase,
and Warwickshire ; Lancashire, North Staffordshire, and Cheshire ;
North Wales ; South Staffordshire and Salop ; Cumberland ; Bristol ;
Forest of Dean ; Somerset ; Kent.

APPENDIX XI¹

The Average Price of Coal per Ton at the Pit's Mouth, and (up to and including 1914) in the London Market; also the Average Value of the quantity exported at the principal Shipping Ports in the United Kingdom from 1873 to 1920

Year	Average price at pit's mouth			English ports								Welsh ports			Scotch ports					
				Average price in London market																
	England	Wales	Scotland	s. d.	s. d.	Liverpool	Newcastle, North Shields, and South Shields	Sunderland	Hartlepool	Hull	Goole	Grimsby	Newport	Cardiff	Swansea	Leith	Bo'ness	Grangemouth	Kirkcaldy and Methil	Glasgow
1873 Franco-German War	—	—	—	31 0	23 1	20 1	20 2	19 4	21 1	19 0	20 10	20 10	21 0	22 2	19 6	22 3	17 7	18 8	16 4	19 6
1874	—	—	—	23 8	18 1	16 11	16 11	14 7	17 6	15 3	20 0	20 0	18 4	19 0	16 9	15 5	13 4	13 9	12 9	14 2
1875	—	—	—	21 8	15 1	13 4	12 5	11 1	14 3	12 8	16 0	16 0	14 6	14 8	12 2	12 0	9 10	9 10	9 5	11 7
1876	—	—	—	19 1	12 10	10 9	10 1	9 8	12 10	11 11	14 0	14 0	10 6	11 2	9 7	11 5	8 10	10 4	8 5	10 1
1877	—	—	—	17 5	11 5	9 10	9 5	9 2	11 9	11 2	12 8	12 8	10 1	10 2	8 8	11 0	8 4	10 1	8 1	10 5
1878	—	—	—	16 4	11 2	8 9	8 4	8 11	10 7	11 0	11 3	11 3	9 8	9 10	8 6	11 5	7 7	9 8	7 10	9 2
1879	—	—	—	15 11	11 2	7 10	7 6	8 3	10 0	9 5	11 1	11 1	9 6	9 3	8 4	11 4	6 11	8 1	7 2	8 6
1880	—	—	—	14 10	10 11	8 0	7 9	8 5	9 7	8 7	9 8	9 8	9 5	9 4	8 7	11 4	7 2	11 2	7 3	8 11
1881	—	—	—	16 0	10 6	7 10	7 8	7 8	9 7	8 7	9 3	9 3	9 8	9 10	8 11	10 6	7 0	10 4	7 2	8 0
1882	5 8	5 9	4 5	15 10	10 6	7 11	8 1	8 3	9 7	8 5	9 7	9 7	9 9	10 3	9 0	9 10	7 5	8 11	7 0	7 11
1883	5 7	6 4	5 2	16 10	11 6	8 1	8 1	8 5	9 7	8 6	9 10	9 9	10 0	10 3	9 3	10 5	8 3	9 7	7 8	8 9
1884	5 4	6 4	4 7	15 5	11 5	7 11	7 11	8 0	9 4	8 5	9 9	9 9	10 0	10 6	9 3	9 11	7 11	8 9	7 5	8 6
1885	5 2	5 10	4 5	15 5	11 5	7 7	7 7	7 8	9 3	8 3	9 9	9 9	9 9	10 0	9 1	9 7	7 11	8 5	7 0	7 0
1886	4 11	5 2	4 0	14 9	10 1	7 3	7 4	7 4	9 0	8 2	9 5	9 5	9 1	9 4	8 6	10 2	7 11	8 5	6 9	7 8
1887	4 11	5 3	4 0	14 10	10 11	7 2	7 3	7 4	9 0	8 3	9 5	9 5	8 3	8 10	8 3	10 4	8 8	8 9	6 9	7 8
1888	5 1	5 9	3 11	14 10	11 1	7 1	7 2	7 3	9 1	8 7	9 1	9 1	8 11	9 2	8 8	9 2	8 2	8 6	6 6	7 10
1889	6 3	7 11	5 2	16 6	12 9	8 4	8 3	8 6	9 11	8 6	9 10	9 10	11 7	12 0	10 3	11 3	8 2	9 1	7 8	8 9
1890	8 1	10 4	6 11	18 7	13 10	11 5	12 2	11 6	12 0	10 11	11 7	11 7	13 10	13 9	12 2	14 6	10 7	10 11	10 3	10 9
1891	7 10	10 3	6 5	18 3	13 5	10 6	11 3	11 0	11 2	10 9	12 0	12 0	13 5	13 5	12 1	14 6	10 9	10 5	10 1	10 3

1892 1893 1894 1895 1896 1897 1898 1899 1900	GreatStrikes	7	3	8	10	5	9	17	7	14	6	9	8	10	0	10	2	11	4	10	8	12	1	11	2	11	10	10	11	14	9	10	2	9	11	9	5	8		
		6	10	7	8	5	9	19	0	14	8	8	9	8	1	8	1	9	8	11	1	10	1	12	2	10	9	10	7	10	3	13	5	10	1	8	1	9		
		6	7	7	6	6	4	16	4	13	1	8	11	7	11	9	5	9	7	11	1	10	0	11	10	11	2	11	4	9	15	8	10	2	10	0	9	0	9	
		5	11	7	2	5	4	14	7	11	9	7	11	10	2	8	11	10	2	9	2	10	9	9	9	9	10	1	9	5	11	1	9	6	9	2	7	5	7	
		5	10	6	9	5	1	14	5	11	9	7	5	9	10	5	7	10	8	9	10	9	10	5	9	1	9	7	9	2	9	10	8	5	8	11	7	5	7	
		5	11	6	7	5	3	15	4	12	3	7	5	7	5	8	5	8	9	10	8	9	10	1	9	4	9	8	9	2	10	2	8	2	9	2	7	4	7	
		6	4	6	10	6	1	16	2	11	5	8	6	7	5	8	9	4	10	9	9	1	10	1	10	7	11	5	10	3	9	9	9	4	9	6	8	1	9	
		7	7	7	9	7	6	18	2	11	11	9	6	9	1	9	10	11	0	11	0	9	1	10	4	11	5	11	7	10	8	11	1	9	11	9	9	5	10	
		10	6	12	0	10	10	22	9	18	3	15	0	15	0	15	11	16	5	15	7	12	6	15	2	19	8	18	10	16	5	14	9	14	8	13	5	13		
		1901	South African War	9	1	11	11	7	11	19	5	15	8	11	6	12	5	12	0	13	4	12	6	13	1	15	8	16	2	15	1	12	5	11	10	12	1	10	11	11
		1902		8	1	10	7	6	8	18	1	13	10	10	5	11	1	11	0	12	0	10	4	12	10	13	6	13	11	14	8	10	11	10	10	9	9	10	10	9
		1903		7	7	9	6	6	3	15	10	13	1	9	11	10	9	10	8	11	9	10	0	12	6	12	10	13	3	12	10	10	7	10	10	10	4	9	9	10
1904		7	1	9	2	5	11	15	0	12	3	9	1	9	11	10	0	11	3	9	4	11	4	12	10	13	0	13	5	9	1	10	0	9	7	9	1	9		
1905		6	9	8	10	5	9	15	6	11	8	8	10	9	8	9	8	10	11	9	0	10	11	12	0	12	3	11	5	9	1	9	9	9	6	8	2	9		
1906		7	0	9	5	6	5	15	9	10	11	9	5	10	1	9	9	10	7	9	0	10	8	12	9	12	9	11	5	8	10	9	9	9	8	8	3	9		
1907		8	5	11	8	8	10	19	9	12	4	10	10	11	6	11	4	11	8	10	6	11	10	14	9	14	9	14	4	10	10	11	1	11	7	11	0	12		
1908		8	9	11	0	7	8	17	6	13	6	11	0	12	1	11	1	11	10	10	11	12	6	14	4	14	11	14	9	10	7	11	5	11	1	10	0	11		
1909		7	9	10	11	6	8	16	11	12	0	9	4	10	1	10	2	10	7	9	10	11	13	1	13	2	14	5	9	11	10	6	10	4	8	10	9	9		
1910		7	10	11	3	6	10	16	3	12	7	9	10	10	7	10	4	10	9	9	8	11	9	13	7	14	0	14	5	9	2	10	5	10	2	9	1	10		
1911		7	9	11	5	6	10	17	0	12	0	9	5	9	9	9	11	10	9	9	6	11	5	13	9	14	2	13	9	8	8	9	10	10	3	8	6	9		
1912	National Coal Strike	8	9	11	1	8	5	20	11	13	5	10	9	10	10	10	10	12	5	10	8	12	10	14	4	14	9	14	7	10	2	11	10	11	10	10	2	12		
1913		9	10	11	9	9	8	21	0	14	11	12	4	12	11	12	8	13	9	12	2	14	4†	15	3	15	10	14	8	11	9	12	9	12	9	11	7	13		
1914		9	8	12	1	9	0	21	0	15	1	12	2	12	9	13	0	13	3	12	1	13	8	15	6	15	7	15	1	11	3	12	7	13	0	11	1	12		
1915		11	10	15	6	12	3	*		20	3	14	9	14	4	15	0	17	1	16	8	16	6	19	1	18	2	19	4	15	10	—	—	18	10	14	6	18		
1916		15	0	18	8	15	4	*		27	10	23	5	21	5	23	2	27	0	24	0	28	5	25	10	23	9	24	9	28	0	21	3	32	0	24	4	27		
1917		16	2	20	6	15	7	*		29	0	26	6	25	5	25	8	26	9	27	4	28	10	27	10	27	2	28	5	26	2	—	—	28	11	25	8	27		
1918		20	2	25	4	19	6	*		33	1	30	11	32	5	30	11	32	8	32	5	29	10	29	8	28	5	31	3	37	10	—	—	28	6	36	10	32		
1919		26	2	33	6	26	0	*		51	1	50	9	54	11	56	9	53	1	42	4	45	8	40	3	43	5	43	2	70	7	67	4	67	8	69	1	50		
1920		32	6	48	4	29	9	*		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

From 1881 to 1911 inclusive, the average prices at the pit's mouth were ascertained or estimated for each county by the Inspectors of Mines, for the purpose of obtaining the total value of coal raised, and since 1911 the value has been given by the owners in accordance with the requirements of the Coal Mines Act, 1911.

The average price in the London coal market has been obtained from the published returns issued by the Coal Exchange each market day, which give the average price of the best sea-borne coals put into barge in the River Thames, including the 1s. 1d. per ton dues paid to the Corporation of London up to the year 1890; since that date no coal dues have been paid.

The average values per ton at the various shipping ports have been deduced from the Annual Parliamentary Returns prepared by the Board of Customs and Excise, giving the quantities exported, and the declared value thereof.

* No quotations.

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APPENDIX XII

COAL MINES (EMERGENCY) ACT, 1920

[10 GEO. 5, CH. 4]

CHAPTER 4

A. D. 1920. **An Act to make temporary provision on account of the emergency arising from the war as to the profits and control of, wages in, and advances in respect of, colliery undertakings, and for purposes connected therewith.**

[31st March 1920.]

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :—

Distribution
of profits of
undertakings.

1.—(1) In view of the emergency resulting from the exigencies of the war, the profits of the undertakings to which this Act applies (hereinafter referred to as undertakings), arising during the period of the operation of this Act, shall be aggregated, and, after such deduction and addition as are hereinafter mentioned, shall be distributed amongst the several undertakings in manner provided by the First Schedule to this Act :

Provided that—

- (i) if the amount of the aggregated profits of all the undertakings, after such deduction and addition, exceeds the aggregate of the total standards of all the undertakings, such part only of that amount as is equal to that aggregate, plus one-tenth part of such excess, shall be so distributable ;
- (ii) if the amount of the aggregated profits of all the undertakings, after such deduction and addition, is less than a sum equal to nine-tenths of the aggregate of the total standards of all the undertakings, the sum distributable shall be increased by an amount equal to such deficiency, if and so far as such deficiency appears to the Controller, or on appeal is proved to the satisfaction of the Board of Referees appointed under the Finance (No. 2) Act, 1915, to have been caused by any order, regulation, or direction issued by the Controller or by the Board of Trade after the first day of January nineteen hundred and twenty.

(2) In determining the sum distributable, the following deduction and addition shall be made from and to the aggregated profits :— A. D. 1920.

(a) There shall be deducted from the aggregated profits any sum paid by the Board of Trade or the Controller under the Coal Mines (War Wage Payment) Directions and Supplementary Directions, 1918 and 1919, in respect of the period of the operation of this Act ;

(b) There shall be added to the aggregated profits any sums collected by the Board of Trade or the Controller under the said directions in respect of the said period.

(3) For the purposes of this Act, ' total standards ' in relation to any undertaking means the sum of all the standards attributable to the accounting periods or parts of accounting periods falling within the period of the operation of this Act, and ' accounting period ' means an accounting period under the provisions of the Finance (No. 2) Act, 1915, relating to excess profits duty as amended or explained by any subsequent enactment (which provisions are hereinafter referred to as the Finance Act).

(4) The provisions of this Act shall be taken to be in full satisfaction of all claims for compensation arising in the period of the operation of this Act in respect of the orders of the Board of Trade made under Regulation 9G of the Defence of the Realm Regulations dated the twenty-ninth day of November nineteen hundred and sixteen and the twenty-second day of February nineteen hundred and seventeen, or anything done thereunder.

2.—(1) For effecting the purposes aforesaid, the following provisions shall have effect :—

Provisions
for effecting
distribution
of profits.

(a) If the profits of an undertaking for any accounting period or part of an accounting period falling within the period of the operation of this Act—

(i) exceed the standard, the excess shall be assessed on and collected from the owner of the undertaking in manner hereinafter provided, and the amount so payable by the owner is hereinafter referred to as coal levy ;

(ii) are less than the standard, or, if there is a loss, such amount as may be required to make up the profit or loss to the amount of the standard shall be paid to the owner of the undertaking by the Controller, and the sum so payable by the Controller is hereinafter referred to as coal award :

(b) If the profits of an undertaking arising during the period of the operation of this Act, after taking into account any coal levy paid or coal award received in respect of the undertaking—

(i) exceed the sum apportioned to that undertaking in manner provided in the First Schedule to this Act, the

A. D. 1920.

excess shall be payable to the Controller by the owner of the undertaking and shall be recoverable as a debt due to the Crown, and the amount so payable is in this Act referred to as adjustment levy ;

(ii) are less than the sum so apportioned, such amount as is required to make good the deficiency shall be paid to the owner of the undertaking by the Controller, and any sum so payable is in this Act referred to as adjustment award.

(2) Coal levy shall be assessed and collected by the Commissioners of Inland Revenue, in like manner as excess profits duty is assessed and collected, and the provisions (including the provisions as to appeals and deposits) of the Finance Act, shall apply accordingly, and the provisions of that Act as to appeals shall apply to amounts of profits and standards, notwithstanding that there may be no liability to excess profits duty or coal levy.

(3) Where under an assessment made before the passing of this Act any sums have been or are paid as excess profits duty, and the sums so paid are, owing to the operation of this Act, in excess of the liability to such duty without taking into account any adjustment levy or adjustment award which may become payable under this Act, the excess shall, pending the final ascertainment of the liability to excess profits duty, be treated as a payment on account of coal levy payable in respect of the accounting period to which the assessment relates, and any sum deposited for the purpose of satisfying excess profits duty or coal-mines excess payments shall, if and in so far as such sum has not been applied in payment of excess profits duty or coal-mines excess payments, be regarded as deposited for the purpose of satisfying coal levy except to the extent to which such balance of the sum so deposited exceeds the liability to coal levy.

Definition of
profits and
standards.

3.—(1) For the purposes of this Act, in relation to any undertaking—

(a) The profits shall be the amount of the profits of the trade or business as determined or determinable under the Finance Act after any adjustment for increased or decreased capital prescribed in section forty-one of that Act :

Provided that no deduction for coal levy or addition for coal award shall be made in determining the profits to be aggregated under this Act ; but for all other purposes any sum paid as coal levy or adjustment levy, or received as coal award or adjustment award, shall be treated respectively as an expense or profit, as the case may be, of the trade or business for the period or part thereof falling within the period of the operation of this Act in respect of which the sum is paid or received ; and, in the case of adjustment levy or adjustment award, the sum shall be regarded as having

accrued equally over the whole period of the operation of this Act, or the part thereof during which this Act applies to the undertaking :

A. D. 1920.

- (b) The standard shall be an amount equal to the pre-war standard of profits determined or determinable in accordance with the provisions of the Finance Act : Provided that—

(i) in any case where the standard does not exceed one thousand pounds, there shall be added to the standard five hundred pounds, or, where an undertaking is owned by a firm or by a company or other body corporate which has been treated as a firm for the purposes of the Finance Act, there shall be added to the standard in respect of each partner or director, as the case may be, whose remuneration is included in the profits, for any accounting period or part thereof falling within the period of the operation of this Act three hundred pounds or the remuneration so included, whichever may be the smaller, so however that the standard shall not be increased by such addition to an amount exceeding two thousand pounds ;

(ii) in any case where the standard exceeds one thousand pounds the foregoing proviso shall apply, subject to this qualification, that the total amount of the addition under that proviso shall be reduced by the amount by which the standard exceeds one thousand pounds ;

(iii) if the standard is a standard for a period of less than a year, the sums mentioned in the foregoing provisos shall be proportionately reduced.

(2) Where part only of an accounting period falls within the period of the operation of this Act, the profits of that accounting period shall be apportioned in accordance with the number of months or fractions of months which fall within that period, and the standard in relation to that part of the accounting period shall be proportionately reduced, and the profits of an undertaking arising during the period of the operation of this Act shall be the sum of the profits of the accounting periods or period falling wholly within that period and of the proportion so ascertained as aforesaid of the profits of accounting periods or period falling partly within the period of the operation of this Act.

(3) Where an undertaking forms part only of a trade or business, the profits and standard of the undertaking shall, for the purposes of this Act, be respectively so much of the profits and standard of the trade or business determined as aforesaid as appears to the Commissioners of Inland Revenue to be properly attributable to the undertaking.

4.—(1) No assets employed in any undertaking shall be removed or disposed of without the consent of the Controller, except in the ordinary course of business.

Prohibition
against part-
ing with

A. D. 1920.
—
assets, pay-
ing divi-
dends, &c.

(2) No profits shall be distributed or withdrawn in respect of any undertaking and no loans, whether secured or unsecured, shall be raised, repaid or varied as to any of their conditions without the consent of the Controller :

Provided that this provision shall not deprive any person of any right to require the repayment of money owing to him.

Provision as
to wages.

5.—(1) The extra wages which have, as from the ninth day of January nineteen hundred and nineteen, been paid by owners of undertakings to colliery workers employed in or at pit heads of coal-mines, that is to say :—

(a) in the case of persons of the age of sixteen or upwards, two shillings ; and

(b) in the case of persons below that age, one shilling, per shift or day worked, or regarded as having been worked for the purposes of calculating their ordinary wages, shall continue to be paid ; and if and so far as such extra wages have been or are paid in respect of any period since the thirty-first day of March nineteen hundred and nineteen shall be charged as expenses in determining the profits of the undertaking.

(2) Where the Controller has advanced any sums to the owner of an undertaking to meet such increase in wages as aforesaid, the owner shall account to the Controller for the amount advanced, and the advance shall, if and so far as it exceeds the amount of such extra wages as aforesaid which have been paid by the owner to colliery workers in respect of the period ended on the thirty-first day of March nineteen hundred and nineteen, be repaid by the owner to the Controller, and the sums received by way of repayment shall be paid into the Exchequer.

(3) The decision of the Controller as to the classes of colliery workers who are entitled to the increased wage under this section shall be final.

Power
to make
advances.

6. Where the Controller considers that, for the purpose of enabling the output of a coal-mine to be maintained, or for any other purpose, it is necessary or expedient so to do, he may, out of sums standing to the credit of the account established under this Act, on the application of the owner, make advances to the owner of an undertaking upon such terms and conditions as the Controller may think fit, with the assent of the Treasury, and any such advance shall be a first charge upon the assets of the undertaking in priority to any mortgage or other charge thereon, and shall be recoverable as a debt due to the Crown, and any sums received by way of repayment or interest shall be paid into the account established under this Act.

Accounts
and audit.

7.—(1) Sums collected by the Commissioners of Inland Revenue under this Act shall be paid into such account as the Controller may direct, and there shall, except as otherwise expressly provided, be paid

into and out of that account any sums received or payable by the Controller under this Act. A. D. 1920.

(2) There shall also be credited or debited to the said account any sum finally standing to the credit or debit of the account of the Controller's receipts and payments under the Coal Mines (War Wage Payment) Directions and Supplementary Directions, 1918 to 1919, in respect of the period from the thirtieth day of June nineteen hundred and eighteen to the thirty-first day of March nineteen hundred and nineteen.

(3) There shall also be debited to the said account such amount as may be necessary to meet the administrative expenses of the Board of Trade constituted for the purpose of the control of the coal industry incurred during the period of the operation of this Act, and any payment made by the Controller with the consent of the Treasury as a consequence of action taken during that period in respect of the coal industry under Regulation 2JJ of the Defence of the Realm Regulations.

(4) Payments into and out of the said account shall be made, and all other matters relating to the administration of that account and to the money standing to the credit of the account shall be regulated in such manner as the Treasury may direct.

(5) If at any time the sums standing to the credit of the account are insufficient to meet the payments to be made thereout, the Treasury may, out of moneys provided by Parliament, pay into the account such sums as may be required for the purpose, but any sums so paid shall be treated as temporary advances and shall be repaid to the Exchequer with interest as soon as there are funds in the account available for the purpose.

(6) At the end of every financial year accounts of the payments into and the expenditure defrayed out of the said account shall be made up in such form and with such particulars as may be directed by the Treasury, and shall be audited by the Comptroller and Auditor-General, and shall be laid before Parliament with a report thereon.

8.—(1) If any person contravenes or fails to comply with any of the provisions of this Act or of any orders or directions given by the Board of Trade or the Controller thereunder, or where any such order or direction is given subject to any condition fails to comply with that condition, he shall be guilty of an offence against this Act. Offences,

(2) A person guilty of an offence against this Act shall, on summary conviction, be liable to a fine not exceeding one hundred pounds, and in the case of a continuing offence to a further fine of ten pounds for each day during which the offence continues.

(3) Where any such offence as aforesaid is committed by a company, every director and manager of the company who knowingly authorizes or permits the default, shall be liable to the same penalties as the company.

A. D. 1920.
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 Termination
 of coal mines
 control
 agreement.
 7 & 8 Geo. 5.
 c. 56.

9. Subject to the provisions of Part I of the Second Schedule to this Act the agreement confirmed by the Coal Mines Control Agreement (Confirmation) Act, 1918, shall cease to have effect, and shall be deemed to have ceased to have had effect as from the first day of April nineteen hundred and nineteen, and that Act shall be repealed as from the same date :

Provided that the provisions of the said agreement relating to the closing of mines, information and accounts, apportionments, and secrecy, as set out and modified in Part II of the Second Schedule to this Act shall have effect as if enacted in this Act.

Interpreta-
 tion.

10.—(1) This Act shall apply to all concerns in Great Britain which consist of or comprise coal-mines, and where a coal-mine forms part only of such a concern this Act shall apply to the whole concern except such parts thereof as may, immediately before the passing of this Act, be excluded from the operation of the Coal Mines Control Agreement (Confirmation) Act, 1918, and the expression ‘undertaking’ in this Act means any such concern except any part so excluded :

Provided that the Controller may exclude from the operation of this Act any undertaking the whole output of coal from which is not likely to exceed five thousand tons in the year ending on the thirty-first day of March nineteen hundred and twenty.

(2) In this Act the expression ‘Controller’ means the person for the time being appointed by the Board of Trade to exercise on behalf of the Board the powers of taking possession of coal-mines and giving directions as to the management or user thereof under the Defence of the Realm Regulations, and in the event of there being no such person appointed, shall mean the Board of Trade.

Short title
 and duration.

11.—(1) This Act may be cited as the Coal Mines (Emergency) Act, 1920.

(2) This Act shall be deemed to have had effect as from the first day of April nineteen hundred and nineteen and shall continue in force until the thirty-first day of August nineteen hundred and twenty (which period is in this Act referred to as the period of the operation of this Act) : Provided that this limitation on the duration of this Act shall not affect the operation of sections seven to ten thereof, and that the expiry of this Act shall not—

- (a)** affect the previous operation thereof or of anything duly done or suffered thereunder ; or
- (b)** affect any right, privilege, exemption, obligation, or liability acquired, accrued, or incurred thereunder (including the assessment and collection of coal levy) ; or
- (c)** affect any penalty, forfeiture, or punishment incurred in respect of any offence committed against this Act ; or

(d) affect any investigation, legal proceeding, or remedy in respect of any such right, privilege, obligation, liability, penalty, forfeiture, or punishment as aforesaid ;
 and any such investigation, legal proceeding, or remedy may be instituted, continued, or enforced, and any such penalty, forfeiture, or punishment may be imposed as if this Act had not expired.

A. D. 1920.
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SCHEDULES.

FIRST SCHEDULE.

Sections 1
 and 2.

APPORTIONMENT OF DISTRIBUTABLE SUM AMONGST UNDERTAKINGS.

1. If the sum distributable does not exceed the aggregate of the total standards of all the undertakings, that sum shall be apportioned amongst the several undertakings in accordance with the proportion which the total standard of each undertaking bears to the aggregate of the total standards of all the undertakings.

2. If the sum distributable exceeds the aggregate of the total standards of all the undertakings—

(a) such part thereof as is equal to that aggregate shall be apportioned in manner provided by paragraph 1 ;

(b) the balance shall be apportioned in manner provided by paragraph 3.

3.—(a) One-half of the balance shall be apportioned amongst the several undertakings in accordance with the proportion which the output as hereinafter defined of each undertaking bears to the aggregate output of all the undertakings.

(b) One-half of the balance shall be apportioned amongst those undertakings the profits of which, as determined for the purposes of aggregation under this Act but with the addition (for this purpose only) of ten shillings in respect of every ton of coal sold during the period of the continuance of this Act for household and domestic purposes or for the manufacture of gas or electricity for household and domestic purposes, at the price prescribed by the Coal (Pit's Mouth) Prices Order and Direction, 1919, exceed the respective total standards thereof in accordance with the proportion which the excess in respect of each undertaking bears to the total of such excesses.

4. The decision of the Controller as to the amount distributable and the apportionment thereof shall, except as otherwise expressly provided, be final.

5. In this Schedule ' output ' means the tonnage of coal raised and weighed at the pit head during the period of the operation of this Act.

SECOND SCHEDULE.

A. D. 1920.

Section 9.

PART I.

PROVISIONS SUBJECT TO WHICH COAL MINES CONTROL AGREEMENT TO
BE DETERMINED.

1. The determination of the agreement confirmed by the Coal Mines Control Agreement (Confirmation) Act, 1918, shall not affect any right or liability which may have accrued before the date of the determination thereof.

2. Any sums payable under the said agreement after the passing of this Act shall, subject to paragraphs 3 and 4, be paid into or out of the account established under the Coal Mines Control Agreement (Confirmation) Act, 1918, which shall continue to be kept until all the sums so payable have been paid.

3. Any sums collected as coal-mines excess payments under the said agreement in respect of any accounting period ended after the thirty-first day of March nineteen hundred and nineteen shall be regarded as payments on account of coal levy except to the extent to which such coal-mines excess payments relate to the profits apportioned for the period up to and including the thirty-first day of March nineteen hundred and nineteen, in accordance with the number of months or fractions of months falling outside the period of the operation of this Act.

4. Any sum paid by the Controller under clause four of the said agreement in respect of any accounting period ended after the thirty-first day of March nineteen hundred and nineteen shall be regarded as a payment on account of coal award or adjustment award except to the extent to which such payment relates to the profits apportioned up to and including the thirty-first day of March nineteen hundred and nineteen, in accordance with the number of months or fractions of months falling outside the period of the operation of this Act; and if no coal award or adjustment award is due in respect of such period or the amount so paid exceeds the coal award or adjustment award, such payment or excess or the part thereof which is attributable to such period, shall be repaid to the Controller and shall be recoverable as a debt due to the Crown.

PART II.

PROVISIONS OF THE COAL MINES CONTROL AGREEMENT RE-ENACTED
WITH MODIFICATIONS

1.—(1) If the owner of an undertaking intends to close or abandon the whole or any part thereof, he shall give to the Controller not less than sixty days' notice of his intention, and, if before the expiration of the notice the Controller directs that the undertaking or such part thereof shall not be closed or abandoned, the undertaking shall continue to be carried on in accordance with the directions of the Controller.

(2) If no such directions as aforesaid are given by the Controller, the undertaking or such part thereof as aforesaid shall, unless otherwise agreed between the Controller and the owner, be closed or aban-

done at the expiration of the notice or at the earliest date at which the owner has power to close or abandon it under the conditions of his tenure. A. D. 1920. —

2.—(1) The owner of every undertaking shall keep and furnish to the Controller at such times and in such form as the Controller may determine such cost accounts, trading accounts, and balance sheets and other accounts and records as the Controller may require, audited and verified in such manner as he may direct, and, where an undertaking forms part only of a trade or business, entirely separate accounts of the undertaking shall be kept, and the price charged on departmental transactions between the undertaking and any other portion of the trade or business shall be on a commercial basis, and such as may from time to time be fixed by the Controller, whose decision shall be final; and, where coal has been or is sold or delivered from an undertaking to a concern in which any owner, partner, or person engaged in the management or direction of the undertaking is directly or indirectly interested, the price to be brought into the accounts of the undertaking in respect of that coal shall be such as may from time to time be fixed by the Controller having regard to market price, and the decision of the Controller shall be final.

(2) The Controller or any person appointed by him in that behalf may require the owner of any undertaking, and any director, manager, or officer of the undertaking, to furnish any information which may be reasonably required by the Controller for the purposes of this Act, and may inspect and take copies of any books, plans, records, and documents relating to the undertaking, and every such owner, director, manager, and officer shall furnish to the Controller or any person appointed by him all such information as aforesaid, and shall produce all such books, plans, records, and documents as may be in his possession or under his control, and shall afford to such person all reasonable facilities for inspecting the same.

(3) If any person knowingly gives any information which is false in any material particular, he shall be guilty of an offence against this Act.

3. The Commissioners of Inland Revenue may make available to the Controller any information acquired by them for the purposes of income tax or excess profits duty or otherwise which the Controller may desire for the purposes of this Act.

4.—(1) Subject to the provisions of the Coal Industry Commission Act, 1919, any information obtained under the last two preceding paragraphs shall be treated as confidential, and shall be used only for the purposes of His Majesty's Government or any department thereof, and no person who obtains any such information shall disclose or make use of any such information for any other purpose:

Provided that the Controller shall publish as soon as may be in respect of the three months ended on the thirty-first day of March nineteen hundred and twenty, and each succeeding three months, statistical summaries of output and of the costs of production, proceeds, and profits of the coal-mining industry as a whole, and for the various districts, notwithstanding anything in this schedule or that such summaries may be compiled from information obtained under paragraph 2 thereof.

(2) Any person who may obtain any information which by virtue

A. D. 1920. of this section is to be treated as confidential shall be required to make a declaration of secrecy in such form as may be prescribed by the Board of Trade, and, subject as aforesaid, any person who has made such a declaration shall, for the purposes of section eighty-nine of the Income Tax Act, 1918, and the declarations made thereunder, be treated in relation to the disclosure of information under the last preceding paragraph of this Act as if he was a person sworn to the due execution of the said Act.

5. Where an undertaking is subject to the Coal Mines Control Agreement (Confirmation) Act, 1918, during part only of an accounting period, the profits standard or the special standard, as the case may require, and the guaranteed standard, and any other sums brought into account in calculating the sums retainable under clause 3 or payable under clause 4 of the said agreement, shall, for the purposes of applying that agreement to such part of such accounting period, be proportionately reduced, and the profits for that period shall be apportioned between the parts of the period before and after the date of the termination of the said agreement in proportion to the number of months or fractions of months in those parts, respectively.

APPENDIX XIII

MINING INDUSTRY ACT, 1920

[10 & 11 GEO. 5, CH. 50]

CHAPTER 50

An Act to provide for the better administration of mines, and to regulate the coal industry, and for other purposes connected with the mining industry, and the persons employed therein.

[16th August 1920.]

BE it enacted by the King's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :—

PART I.

ADMINISTRATION OF MINING INDUSTRY.

Establish-
ment of
Mines De-
partment of
Board of
Trade.

1. For the purpose of securing the most effective development and utilization of the mineral resources of the United Kingdom and the safety and welfare of those engaged in the mining industry, there shall be established a department of the Board of Trade (to be known as the Mines Department) under a Parliamentary Secretary of the Board (in this Act referred to as 'the Secretary for Mines'), and all powers and duties of the Board of Trade in relation to mines and the mining in-

dustry, whether under this Act or otherwise, shall, subject to the directions of the Board of Trade, be exercised and performed through the Secretary for Mines. A. D. 1920.

2.—(1) It shall be the duty of the Board of Trade, in the exercise and performance of their powers and duties in relation to mines and the mining industry, to take steps to carry out the purposes aforesaid, and there shall, as from such date or dates as His Majesty in Council may determine, be transferred to the Board of Trade all the powers of a Secretary of State under enactments relating to mines and quarries. General powers and duties.

(2) If in regard to any other powers and duties of any Government department relating to mines, quarries, or minerals or the mining industry or the persons engaged therein, whether conferred by statute or otherwise, it is deemed expedient that such powers and duties should be transferred to the Board of Trade, or be exercised or performed by the Board of Trade concurrently or in consultation with the Government department concerned, His Majesty in Council may by order make provision for the purpose.

(3) The Board of Trade shall undertake the collection, preparation, and publication of information and statistics relating to the mining industry, and shall co-operate with such Committees of the Privy Council as are formed for the purpose, and any other Government departments concerned, in the initiation and direction of research in relation to matters connected with the powers and duties of the Board of Trade.

(4) His Majesty in Council may by order make such consequential and supplemental provisions as appear necessary or expedient for the purpose of giving full effect to any transfer of powers or duties by or under this Act, including provision for the transfer and vesting of any property, rights, and liabilities held, enjoyed, or incurred by any Government department in connection with any powers or duties transferred, and may make such adaptations in the Acts or regulations relating to such powers or duties as appear necessary to make exercisable by the Board of Trade the powers and duties so transferred.

(5) Before any Order in Council under this section is made, notice of the proposal to make the order and of the place where copies of a draft of the order can be obtained shall be published in the London, Edinburgh, and Dublin Gazettes, as the case may require, and in such other manner as the Board of Trade think best adapted for ensuring publicity.

(6) An Order in Council under this section may be altered or revoked by a subsequent order.

(7) In connection with the transfer of powers and duties to the Board of Trade by or under this Act, the provisions set out in the First Schedule to this Act shall have effect.

3.—(1) During a period of one year after the thirty-first day of Powers of regulating

A. D. 1920.
 —
 export and
 price of
 coal.

August, nineteen hundred and twenty, it shall be lawful for the Board of Trade from time to time to give directions—

- (a) regulating the export of coal and the supply of coal for the bunkering of vessels; and
- (b) regulating the pit head price to be charged for coal sold for consumption in the British Islands, and for coal sold for the bunkering of vessels other than vessels proceeding to ports outside the British Islands.

10 Geo. 5,
 c. 4.

(2) Whilst any such directions are operative it shall be lawful for the Board of Trade also to give directions as to the wages to be paid to workers in coal-mines, and by order to regulate the distribution of profits, and any such order shall contain provisions framed on principles similar to the principles on which the provisions of the Coal Mines (Emergency) Act, 1920, are framed, so as to secure, as far as practicable, an equitable distribution as between different collieries:

Provided that before any such order is made a draft thereof shall be laid before both Houses of Parliament, and the order shall not be made unless the draft has been approved by resolution of both Houses of Parliament, nor, if modifications in the draft are agreed to by both Houses, otherwise than as so modified.

(3) If any person exports, sells or supplies, or offers for sale, or attempts to export or supply any coal in contravention of any directions given under this section or otherwise contravenes any such directions, he shall be liable on summary conviction to a fine not exceeding one hundred pounds, or, in the case of a contravention of the directions as to the export, supply or price of coal, at the discretion of the court, to a fine not exceeding treble the amount by which the sum paid or payable on any coal exported, supplied or sold by him in contravention of any such directions exceeds the maximum sum which would have been paid or payable for the coal if there had been no such contravention, and any coal which, in contravention of any such directions, is exported, or brought to any place or water-borne to be shipped for exportation or for bunker coal, shall be forfeited under the Customs (Consolidation) Act, 1876, as amended by any subsequent enactment:

39 & 40 Vict.
 c. 36.

Provided that a prosecution for an offence under this subsection may, notwithstanding anything in any other Act, be instituted at any time within one year of the commission of the offence.

(4) The powers of giving such directions and making such orders as aforesaid may be exercised by the Board of Trade after the expiration of the said one year, till the thirty-first day of March, nineteen hundred and twenty-two, if the exercise of such powers is authorized by a resolution passed by both Houses of Parliament.

(5) An order made under this section shall have effect as from such date (which may be a date earlier than the date of the making of the

order) as may be specified in the order, and shall have effect as if enacted in this Act, but may be revoked or varied by a subsequent order. A. D. 1920.

(6) The Coal Mines (Emergency) Act, 1920, shall continue in force until the date as from which the first order made under this section takes effect, or until the thirty-first day of August, nineteen hundred and twenty-one, whichever may be the earlier ; and that Act shall have effect as if in section eleven thereof for the reference to the thirty-first day of August, nineteen hundred and twenty, there were substituted a reference to the date to which the Act is continued by this provision. 10 Geo. 5, c. 4.

(7) The provisions of this section relating to the export of coal shall apply to coke, briquettes, and other solid fuel of which coal or coke is a constituent, in like manner as they apply to coal.

4.—(1) The Board of Trade shall appoint committees for the purpose of giving the Board advice and assistance on matters connected with their powers and duties under this Act relating to coal and the coal industry and to the metalliferous mining industry respectively, and may appoint one or more other committees for the purpose of giving the Board advice and assistance on matters connected with any of their other powers and duties relating to mines and the mining industry, and in appointing members of any committee hereinbefore referred to the Board of Trade shall act after consultation with the various interests concerned. Advisory committees.

(2) The Board of Trade shall refer to an advisory committee for advice any question relating to the powers and duties of the Board relating to mines and the mining industry which appears to the Board of such a nature as to make such reference desirable, and shall take into consideration any representations thereon which may be made to the Board by any such committee.

(3) The advisory committee on coal and the coal industry shall consist of a chairman and twenty-four other persons, of whom—

- Four shall be representative of owners of coal-mines ;
- Four shall be representative of workers in or about coal-mines ;
- Three shall be representative of employers in other industries ;
- Three shall be representative of workers in other industries ;
- One shall be a mining engineer ;
- Two shall be agents or managers or under-managers of coal-mines holding first class certificates ;
- One shall be a coal exporter ;
- One shall be a coal factor or coal merchant ;
- One shall be a person with experience of commerce other than the production or distribution of coal ;
- One shall be a person with experience in co-operative trading ;
- Three shall be persons with expert knowledge of medical or other science.

A. D. 1920.

Staff re-
muneration
and ex-
penses. }

5.—(1) There shall be paid out of moneys provided by Parliament to the Secretary for Mines an annual salary not exceeding fifteen hundred pounds.

(2) The salaries and remuneration of the officers and servants of the Department of Mines and the expenses of the Department, to such amount as may be sanctioned by the Treasury, shall be paid out of moneys provided by Parliament, provided that the total amount of such salaries, remuneration, and expenses shall not in any year exceed two hundred and fifty thousand pounds.

(3) There shall be transferred and attached to the Board of Trade such of the persons employed under any other Government department in or about the execution of the powers and duties transferred by or under this Act to the Board of Trade, as the Board of Trade and the other Government department, with the sanction of the Treasury, may determine.

(4) The Board of Trade may from time to time distribute the business of the department amongst the several persons transferred and attached thereto in pursuance of this Act, in such manner as they may think right, and those officers shall perform such duties in relation to that business as may be directed by the Board of Trade :

Provided that such persons shall be in no worse position as respects the tenure of office, salary, or superannuation allowances than they would have been if this Act had not been passed. |

Ability of
Secretary for
Mines to sit
in Parlia-
ment.

6. The office of the Secretary for Mines shall not render the holder thereof incapable of being elected to or sitting or voting as a member of the Commons House of Parliament.

PART II.

REGULATION OF COAL MINES.

Pit and
district
committees,
and area and
national
boards.

7. The Board of Trade shall by regulations provide for the constitution—

(a) of a pit committee for every coal-mine where a resolution in favour thereof is passed by a majority (to be ascertained by ballot in accordance with the said regulations) of the workers employed in or about the mine, except that it shall not be necessary to constitute a pit committee for any mine which is a small mine within the meaning of the Coal Mines Act, 1911 ;

(b) of a district committee for each of the districts mentioned in Part I of the Second Schedule to this Act ;

(c) of an area board for each of the areas mentioned in Part II of that schedule ;

(d) of a National Board ;

1 & 2 Geo. 5,
c. 50.

having such functions as may, subject to the provisions of this Act, be prescribed by the regulations, and the procedure and meetings of the several committees and boards shall be such as may be prescribed by the regulations :

A. D. 1920.

Provided that—

- (i) where a district is co-extensive with an area, the district committee shall perform the functions of the area board as well as of the district committee ;
- (ii) districts and areas may be varied by order of the Board of Trade after consultation with the National Board and with the consent of the district committees or area boards affected ;
- (iii) where a mine situate in one district has, for industrial purposes, been customarily dealt with as if it were a mine situate in an adjoining district, that mine shall, for the purposes of this Part of the Act, if the owner and the workers employed in or about the mine so agree, be treated as being situate in such adjoining district.

8.—(1) A pit committee shall not exceed ten in number and shall consist of representatives of the owners and management of the mine appointed by the owners and of workers employed in or about the mine selected by ballot of the workers in accordance with the regulations from amongst their own number, so however that the representatives of the workers shall constitute half of the number of the pit committee.

Constitution and functions of pit committees.

(2) The functions of a pit committee shall be to discuss and make recommendations with respect to—

- (a) the safety, health, and welfare of the workers in connection with their work at the mine ;
- (b) the maintenance and increase of output ;
- (c) reports made on an inspection under section sixteen of the Coal Mines Act, 1911, which reports shall be referred to the committee by the manager ;
- (d) disputes arising in connection with the mine including disputes as to wages ;
- (e) any other questions and matters relating to the mine which may be prescribed by the regulations.

(3) In the case of a mine for which a pit committee is established the management of the accommodation and facilities for taking baths and drying clothes provided under section seventy-seven of the Coal Mines Act, 1911, shall be under the control of the pit committee instead of that of a committee established in accordance with subsection (5) of that section.

(4) The regulations shall provide for matters which cannot be satisfactorily disposed of by the pit committee being referred to the district

A. D. 1920. committee, or, in the case of questions to which the Coal Mines Act, 1911, applies, to the inspector of the division.

(5) For enabling a pit committee to exercise their functions under paragraphs (a) and (b) of subsection (2) of this section, the committee shall be entitled to be furnished by the manager of the mine with such relevant information as may be necessary for the purpose, and may appoint two of their members, one being a person concerned in the management of the mine and one being a worker, to make periodical inspections of the mine or any part thereof and to report the result of their inspections to the committee, and the persons so appointed shall have all such facilities for the purpose of making inspections as persons appointed to make inspections under section sixteen of the Coal Mines Act, 1911, and that section shall apply accordingly.

(6) Any recommendations of the pit committee made on any report under section sixteen of the Coal Mines Act, 1911, which has been referred to the committee, and on any other matters to which that Act relates, shall be sent to the inspector of the division by the manager.

Constitution
and func-
tions of
district
committees.

9.—(1) A district committee shall consist of representatives of the owners and management of the coal-mines in the district appointed by the owners in accordance with the regulations constituting the committee, and an equal number of representatives of workers employed in or about such mines elected by the workers in accordance with those regulations.

(2) A district committee shall take into consideration—

(a) questions affecting the district of the same nature as those which may be the subject of discussion and recommendations by a pit committee ;

(b) any questions which may be referred to them by a pit committee ;

(c) any questions which may be referred to them by the area board, or the Board of Trade ;

and, if the matter is one proper to be dealt with by the area board rather than by the district committee, they shall refer the matter to the area board, and in any other case they shall deal with the matter themselves and make such recommendations as they think fit, and, if their recommendations are not complied with, they may forward them with a report on the matter to the Board of Trade.

Constitution
and func-
tions of area
boards.

10.—(1) An area board shall consist of representatives of the owners and management of the coal-mines in the area nominated in accordance with the regulations constituting the board by the representatives of the owners and management who are members of the various district committees within the area, and an equal number of representatives of workers employed in or about such mines so nominated by the

representatives of workers who are members of the district committees within the area. A. D. 1920.

(2) The area board shall take into consideration—

- (a) questions affecting the area of the same nature as those which may be the subject of consideration by a district committee ;
- (b) any questions which may be referred to them by a district committee ;
- (c) any questions which may be referred to them by the National Board or the Board of Trade ;

and, if the matter is one proper to be dealt with by the National Board rather than by the area board, in that it raises any question affecting more than one area, they shall refer the matter to the National Board, and in any other case they shall deal with the matter themselves, and make such recommendations as they think fit, and, if their recommendations are not complied with, they may forward them with a report on the matter to the Board of Trade.

(3) An area board shall formulate, at such intervals and on such principles as may be prescribed by the National Board, schemes for adjusting the remuneration of the workers within the area, having regard among other considerations to the profits of the industry within the area, and any such scheme when formulated shall be submitted to the National Board for their approval, and, if approved by that Board, shall be referred to the Board of Trade, and for the purposes of this subsection the owners of mines in the area shall furnish to accountants appointed by the area board such information as they may require in order that they may ascertain for the information of the area board particulars of the output, cost of production, proceeds and profits in the area as a whole :

Provided that no such scheme shall be formulated during the period of the operation of the Coal Mines (Emergency) Act, 1920, or, if the Board of Trade so direct, whilst an order made by the Board of Trade under Part I of this Act as to the distribution of profits is in force.

(4) The accountant so appointed as aforesaid shall not include in his report or disclose information with respect to any particular undertaking, and, if he does so, he shall be guilty of an offence and liable on summary conviction to a fine not exceeding fifty pounds.

11. The Board of Trade may by regulations provide for district committees or area boards determining any questions and exercising any powers which before the passing of this Act can be determined or exercised by a conciliation board or by a joint district board constituted under the Coal Mines (Minimum Wage) Act, 1912 ; and the regulations may provide for the appointment of an independent chairman, with a casting vote, to preside at meetings of any district committee or area board when determining any such question or exercising

Additional powers of district committees and area boards.

2 & 3 Geo. 5, c. 2.

A. D. 1920. any such power, and may add to or alter the districts mentioned in the Schedule to the Coal Mines (Minimum Wage) Act, 1912 :

Provided that the regulations shall not provide for the appointment of such an independent chairman when the committee or board acts as a conciliation board except in pursuance of an agreement to that effect.

Constitution and functions of National Board.

12.—(1) The National Board shall consist of such number of members as may be prescribed by the regulations, of whom one-half shall be representatives of the owners and management of coal-mines throughout the United Kingdom, and one-half shall be representatives of workers employed in or about such mines.

(2) The National Board shall take into consideration—

(a) questions, including wages questions, affecting the coal-mining industry as a whole ;

(b) any questions which may be referred to them by an area board ;

(c) any questions which may be referred to them by the Board of Trade ;

and may make recommendations in respect thereof, and may, in any case when their recommendations are not complied with, or in any other case where they think fit, forward their recommendations with a report on the matter to the Board of Trade.

(3) The National Board shall also determine, subject to the approval of the Board of Trade, the principles on which schemes by area boards under this Part of this Act for adjusting the remuneration of workers are to be framed, and shall consider all such schemes when submitted to them for their approval.

Power of Board of Trade to direct compliance with recommendations and schemes.

13. Where any recommendations made by a district committee or area board or by the National Board, or any scheme made by an area board and approved by the National Board, have been forwarded or referred to the Board of Trade as aforesaid, the Board of Trade shall take such recommendations or scheme into consideration, and may, if they think fit, give directions requiring any person engaged in the coal-mining industry to comply therewith, and it shall be the duty of every person to whom those directions apply to comply therewith, and if any such person fails to do so he shall be guilty of an offence against the Coal Mines Act, 1911 :

Provided that, where the recommendations relate to matters within the scope of the authority of some other Government department, the Board of Trade before giving any such directions as aforesaid shall obtain the approval of that other department.

Meaning of recommendation.

14. For the purpose of the foregoing provisions of this Part of this Act, the expression 'recommendation' means a recommendation approved by a majority of the representatives of the owners and

management present at the meeting at which the recommendation was passed, and by a majority of the representatives of the workers so present.

A. D. 1920.

15. There shall be paid to the members of pit committees such fees for attendance at meetings thereof as may be prescribed by the regulations, and such payments, together with any expenses incurred in accordance with the regulations by such committees in the discharge of their functions, shall be payable by the owner of the mine as part of the working expenses of the mine.

Fees to members and expenses of pit committees.

16. The provisions of sections eighty-six and one hundred and seventeen of, and Part I of the Second Schedule to, the Coal Mines Act, 1911, which relate to general regulations shall apply with the necessary modifications to regulations under this Part of this Act.

Provisions as to regulations under Part II.

17. If at the expiration of one year from the passing of this Act it appears to the Board of Trade that the scheme of this Part of the Act has been rendered abortive by reason of the failure on the part of those entitled to appoint representatives as members of the pit and district committees, area boards, and the National Board to avail themselves of such right, the Board of Trade shall issue a report of the circumstances, and that report shall be laid before Parliament, and at the expiration of thirty days during the session of Parliament from the date when it is so laid all the provisions of this Part of this Act shall cease to have effect unless in the meantime a resolution to the contrary is passed by both Houses of Parliament.

Cessation of Part II in certain eventualities.

PART III.

GENERAL.

18.—(1) It shall be lawful for the Board of Trade after consultation with the district committee or committees concerned, or holding such other inquiry as they may think fit, to make schemes with respect to any group of mines as to the drainage thereof, and as to the apportionment as between the owners of the mines in question of any expenditure for a common purpose that may be required by any such scheme, and any such scheme may amend or repeal any local Act of Parliament in connection with such drainage.

Schemes as to drainage.

(2) For this purpose the Board of Trade may adopt with or without modifications any scheme relating to the drainage of any group of mines proposed by all or any of the owners of such mines.

(3) The provisions of sections eighty-six and one hundred and seventeen of, and Part I of the Second Schedule to, the Coal Mines Act, 1911, which relate to general regulations shall apply with the necessary modifications to schemes under this section :

Provided that before any scheme involving the amendment or repeal

A. D. 1920. of any local Act of Parliament comes into force it shall be laid before each House of Parliament for a period of not less than fourteen days during which that House is sitting, and, if either House before the expiration of that period presents an address to His Majesty against the scheme or any part thereof, no further proceedings shall be taken thereon without prejudice to the making of any new scheme.

Power to
make general
and special
regulations
with respect
to metalli-
ferous mines.
35 & 36 Vict.
c. 77.
38 & 39 Vict.
c. 39.

19.—(1) The provisions of sections eighty-six, eighty-seven, and one hundred and seventeen of, and the Second Schedule to, the Coal Mines Act, 1911 (which relate to the making of general and special regulations), shall apply to metalliferous mines within the meaning of the Metalliferous Mines Regulation Acts, 1872 to 1875, as if they were re-enacted in those Acts and in terms made applicable to those mines but with this modification, that in the said section eighty-six for the reference to Part II of, or the Third Schedule to, the Coal Mines Act, 1911, there shall be substituted a reference to the general rules contained in section twenty-three of the Metalliferous Mines Regulation Act, 1872.

(2) For the purposes of the Metalliferous Mines Regulation Acts, 1872 and 1875, the expression 'mine' does not include any part of the premises on which any manufacturing process, other than a process ancillary to the getting, dressing, or preparation for the sale of minerals is carried on.

Establish-
ment of fund
for improve-
ment of
social condi-
tions of
colliery
workers.

20.—(1) There shall be constituted a fund to be applied for such purposes connected with the social well-being, recreation, and conditions of living of workers in or about coal-mines and with mining education and research as the Board of Trade, after consultation with any Government Department concerned, may approve.

(2) The owners of every coal-mine shall, before the thirty-first day of March, nineteen hundred and twenty-one, and before the same day in each of the subsequent five years, pay into the said fund a sum equal to one penny a ton of the output of the mine during the previous calendar year, and the sums so payable in respect of any mine shall be defrayed as part of the working expenses of the mine and shall be recoverable either as a debt due to the Crown or by the Board of Trade summarily as a civil debt :

Provided that in the case of the first payment the amount shall be calculated with reference to the output during the six calendar months ending the thirty-first day of December, nineteen hundred and twenty.

(3) The duty of allocating the money from time to time standing to the credit of the said fund to the several purposes aforesaid shall be vested in a committee consisting of five persons, appointed by the Board of Trade, of whom one shall be appointed by the Board of Trade after consultation with the Mining Association of Great Britain, and another after consultation with the Miners' Federation of Great Britain.

The Committee shall have the assistance of three assessors appointed by the Minister of Health, the Board of Education and the Secretary for Scotland respectively ; the assessors shall have the right of attending meetings of the committee and of taking part in the deliberations thereof, but not of voting ; and different persons may be appointed by the above-mentioned departments to act as assessors in relation to different matters :

Provided that the Committee shall take into consideration any scheme submitted by a district committee, and that before allocating any money for a local purpose they shall consult with the district committee (if any) concerned ; and that the Committee shall allocate for the benefit of the several districts mentioned in Part I of the Second Schedule to this Act sums equal to four-fifths of the contributions from the owners of coal-mines in those districts respectively.

(4) The committee may invite a local authority to submit a scheme for any of the purposes to which the fund may be applied, and, if such scheme be approved by the committee, they may make such grants in aid to the said local authority out of the fund and upon such conditions as may seem to them desirable :

Provided that in no case shall any grant be made out of the fund for the building or repairing of dwelling-houses.

(5) Where money is allocated for the purpose of meeting the cost, in whole or in part, of providing accommodation and facilities at a coal-mine for the workmen taking baths and drying clothes, and such accommodation and facilities are so provided, section seventy-seven of the Coal Mines Act, 1911, shall apply as if such accommodation and facilities had been provided under that section :

Provided that—

(a) cost of maintenance shall not be deemed to include any interest on capital expenditure so far as that expenditure was met out of money allocated from this fund ; and

(b) the contribution of the workmen to the cost of maintenance shall be reduced by the proportion which the money so allocated from the fund bears to the total capital expenditure.

(6) Payments out of and into the fund, and all other matters relating to the fund, and moneys standing to the credit of the fund (including temporary investments thereof) shall be made and regulated in such manner as the Board of Trade, subject to the approval of the Treasury, may direct.

(7) The Board of Trade shall in each year cause an account to be prepared and transmitted to the Comptroller and Auditor-General for examination showing the receipts into and issues out of the said fund in the financial year ended the thirty-first day of March preceding, and the Comptroller and Auditor-General shall certify and report upon the same, and such account and report shall be laid before Parliament.

A. D. 1920.

Accounts,
statistics,
returns, &c.

21.—(1) It shall be the duty of the owners, agents, and managers of any mine, and any other persons engaged in the mining industry, to furnish to the Board of Trade, in such manner and form as the Board may direct, such accounts, statistics, returns, plans and other information as the Board may require for the purpose of their powers and duties under this Act.

(2) No information with respect to any particular undertaking shall be included in any published report, unless the owner of the undertaking so agrees, and any person who may obtain any such information under this section shall be required to make a declaration of secrecy in such form as may be prescribed by the Board of Trade, and any person who acts in contravention of any declaration which he has so made shall be guilty of a misdemeanour and on conviction be liable to imprisonment, with or without hard labour, for a term not exceeding two years, or to a fine not exceeding one hundred pounds, or to both imprisonment and a fine.

Power to
hold in-
quiries.

22.—(1) The Board of Trade may hold such inquiries as they consider necessary or desirable for the purposes of this Act, and the Board of Trade and, if authorized by the Board of Trade, the person appointed to hold any such inquiry, may, by order, require any person, subject to the payment or tender of the reasonable expenses of his attendance, to attend as a witness and give evidence, or to produce any documents in his possession or power which relate to any matter in question at the inquiry, and are such as would be subject to production in a court of law, and, if any person fails without reasonable excuse to comply with any of the provisions of any such order, he shall be liable on summary conviction to a fine not exceeding five pounds, and the person holding the inquiry shall have power to take evidence on oath and for that purpose to administer oaths.

(2) Notices of inquiries may be given and published in accordance with such general or special directions as the Board of Trade may give.

(3) The powers of the Board of Trade under this section shall be in addition to and not in derogation of any powers of holding inquiries transferred to the Board from any other Government department under this Act.

Inter-
departmental
arrange-
ments.

23. The Board of Trade and any other Government department may make arrangements for the exercise and performance by such other Government department or by the Board of Trade of any of the powers and duties of the Board of Trade or such other Government department relating to mines and the mining industry which appear to them to be such as could be more conveniently so exercised and performed, and in such case such other Government department and their officers, or the Board of Trade and their officers, as the case may be, shall have all the powers and duties for such purpose as are exercise-

able by the Board of Trade and their officers or such other department and their officers. A. D. 1920.

24. The Price of Coal (Limitation) Act, 1915, shall be repealed as from the first day of September, nineteen hundred and twenty. Repeal of
5 & 6 Geo. 5,
c. 75.

25. For the purposes of this Act, unless the context otherwise requires,— Interpreta-
tion.

The expressions 'owner' and 'agent' have the same meanings as in the Coal Mines Act, 1911, or the Metalliferous Mines Regulation Act, 1872, as the case may require :

The expression 'management' in relation to a coal-mine includes the agent, manager, under-managers, technical and administrative staff, officials and deputies, firemen and examiners of the mine :

The expressions 'mines' and 'the mining industry' include, respectively, quarries and the quarrying industry :

The expression 'output' in relation to a coal-mine means the tonnage in saleable coal raised and weighed at the pit head.

26. This Act may be cited as the Mining Industry Act, 1920. Short title.

SCHEDULES.

FIRST SCHEDULE.

Section 2.

TRANSITORY PROVISIONS.

1. In the construction and for the purposes of any Act of Parliament, judgment, decree, order, award, deed, contract, regulation, byelaw, or other document passed or made before the transfer to the Board of Trade from any other Government department of any powers or duties by or under this Act, but so far only as may be necessary for the purpose or in consequence of such transfer, the name of the Board of Trade shall be substituted for the name of the other Government department or any officer thereof.

2. Where anything has been commenced by or under the authority of any other Government department before the transfer to the Board of Trade of any powers or duties by or under this Act, and such thing is in relation to the powers or duties so transferred, such thing may be carried on and completed by or under the authority of the Board of Trade.

3. Where at the time of the transfer of any powers or duties by or under this Act any legal proceeding is pending to which any Government department is a party, and such proceeding has reference to the powers and duties transferred by or under this Act, the Board of Trade shall be substituted in such proceeding for the other Government department, and such proceeding shall not abate by reason of the substitution.

A. D. 1920.

Sections 7
and 20.

SECOND SCHEDULE.

PART I.

COAL DISTRICTS.

Name of Districts.	Counties or parts of Counties included.
1. Fife and Clackmannan .	Counties of Fife, Clackmannan, Kinross, and Sutherland.
2. The Lothians . . .	Counties of Midlothian and Haddington.
3. Lanarkshire . . .	Counties of Linlithgow, Lanark, Renfrew, Dumbarton, and Stirling.
4. Ayrshire	Counties of Ayr, Dumfries, Argyll.
5. Northumberland . .	County of Northumberland.
6. Durham	County of Durham.
7. Cumberland	Counties of Cumberland and Westmorland.
8. Lancashire and Cheshire	Counties of Lancashire and Cheshire.
9. North Wales	Counties of Denbigh and Flint.
10. South Yorkshire . .	South Yorkshire coalfield.
11. West Yorkshire . . .	West Yorkshire coalfield.
12. Nottinghamshire . .	County of Nottingham.
13. Derbyshire	County of Derby, exclusive of the South Derbyshire coalfield.
14. South Derbyshire . .	South Derbyshire coalfield.
15. North Staffordshire .	North Staffordshire coalfield.
16. Cannock Chase . . .	Cannock Chase coalfield.
17. South Staffordshire and Worcestershire.	South Staffordshire coalfield, and County of Worcester.
18. Leicestershire . . .	Leicestershire coalfield.
19. Warwickshire	County of Warwick.

COAL DISTRICTS (*continued*).

A. D. 1920.

Name of Districts.	Counties or parts of Counties included.
20. Shropshire . . .	County of Shropshire.
21. Forest of Dean . . .	Forest of Dean coalfield.
22. Somerset . . .	County of Somerset.
23. Bristol . . .	Bristol coalfield.
24. South Wales . . .	Counties of Monmouth, Glamorgan, Pembroke, Carmarthen, and Brecon.
25. Kent . . .	County of Kent.
26. Ireland . . .	All Counties in Ireland.

PART II.

COAL AREAS.

Names of Areas.	Coal Districts included.
1. Scotland . . .	Fife and Clackmannan, The Lothians, Lanarkshire, and Ayrshire.
2. Northumberland . . .	Northumberland.
3. Durham . . .	Durham.
4. Midlands . . .	Cumberland, Lancashire and Cheshire, North Wales, South Yorkshire, West Yorkshire, Nottinghamshire, Derbyshire, South Derbyshire, North Staffordshire, Cannock Chase, South Staffordshire and Worcestershire, Leicestershire, Warwickshire, Shropshire.
5. Southern . . .	Forest of Dean, Somerset, Bristol, and Kent.
6. South Wales . . .	South Wales.
7. Ireland . . .	Ireland.

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